Department of Community Planning & Economic Development
250 South 4th Street, Room 300
Minneapolis, MN 55415-1385

Minneapolis
City of Lakes

MEMORANDUM

TO: Heritage Preservation Commission

FROM: Shanna Sether, Senior City Planner, (612) 673-2307

DATE: March 8, 2016

SUBJECT: Bunge Elevator Complex Demolition, 937 13th Ave SE, 901 12th ½ Ave SE, 901 12th Ave SE, 1200-06 Brook Ave SE

HISTORIC PROPERTY INFORMATION

Current Name	Bunge Elevator Complex
Historic Name	Bunge Midway grain elevator
Historic Address	932 12th Ave SE
Original Construction Date	Grain Elevators (1935) and Headhouse (1936)
Original Architect	N/A
Original Builder	N/A
Original Engineer	N/A
Historic Use	Terminal grain elevator and headhouse
Current Use	Vacant
Proposed Use	93-unit multiple-family dwelling

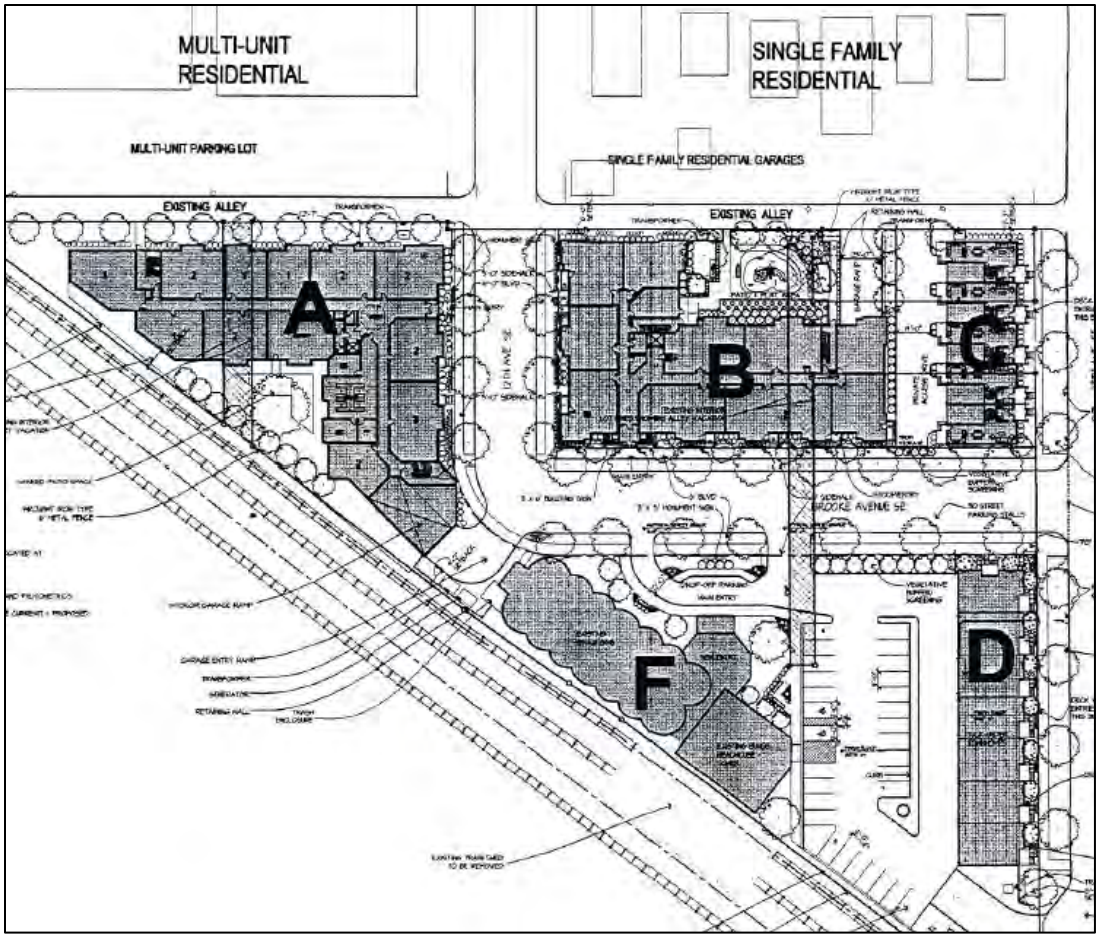
CLASSIFICATION

Local Historic District	N/A
Period of Significance	1935 – 1940
Criteria of Significance	N/A
Date of Local Designation	N/A
Date of National Register Listing	N/A
Applicable Design Guidelines	N/A

RELATED APPROVALS.

The project known as the Bunge Elevator Complex/Van Cleve Courts was proposed by Project for Pride in Living, Inc. (PPL) and was reviewed by the HPC in 2006. The applicant applied for a demolition of a potential historic resource application to allow for demolition of several non-contributing buildings and two contributing buildings to allow for the Van Cleve Apartment and Townhouse project and the conversion of two contributing resources to residential buildings. The Heritage Preservation Commission approved the demolition of a potential historic resource application on November 14, 2006.

Historic Building Inventory						
Property		**Historically on site**	**Built**	**Historic status**	**Status**	**Existing use**
A	Van Cleve Apartments West	Warehouse	1973	Non-contributing	Demolished	**4-story, 50-unit apartments**
B	Van Cleve Apartments East	Single family residence at 935 13 Ave. SE	1905	Non-contributing	Demolished	**3-story, 35-unit apartments**
		"1954 Annex" Elevator	1954	Non-contributing	Demolished	
		"1935 Annex" Elevator	1936	Contributing	Demolished	
		Quonset shed	1947	Non-contributing	Demolished	
C	Townhomes	Same as for Building B				**2-story, 4-unit townhomes**
D	Townhomes	Office building	1965	Non-contributing	Demolished	**Vacant**
		Office building	1936	Contributing	Demolished	
F	Bunge Redevelopment	Headhouse	1936	Contributing	Existing	**Headhouse**
		"1935 Annex" Elevator	1935	Contributing	Existing	**Grain elevator**



The Bunge Elevator Complex/Van Cleve Courts project was a three-phased project that did not reach the full scope as proposed in 2006. The Townhomes project noted as site "D" and the conversion of the two remaining buildings, the Headhouse and the 1935 Annex Elevator, noted as site "F" to residential uses were never constructed.

HISTORY

The 2006 project received federal funds from the U.S. Department of Housing and Urban Development (HUD) and was required to comply with Section 106 Review of the National Historic Preservation Act of 1966, as amended. PPL's consultant for this project, 106 Group, completed the Phase II Architectural History of the property required for the Section 106 Review and identified the property's association with events important in the commerce of Minneapolis and established that the property had retained sufficient historical integrity, in order to convey that significance. Therefore, the 106 Group concluded that the Bunge Midway grain elevator complex was eligible for listing on the National Register of Historic Places (NRHP). The grain elevator, in particular, was determined to be eligible under Criterion A for its association with the Minneapolis grain trade and its major contribution in giving Minneapolis a larger capacity of grain storage than any other North American city, thereby enabling the grain exchange commodities market to flourish during the mid-twentieth century. The property is significant in the area of commerce and its period of significance is 1935 to 1940.

However, the HPC approved the demolition of several contributing buildings to allow for the proposed new construction and conversion of the existing headhouse and 1935 Annex Elevator. Staff's analysis of the proposed removal and conversion from the 2006 staff report to the HPC is below:

> **Removal of non-significant buildings:** Consistent with the Secretary of the Interior's Standards (Standards), the Project includes the removal of the following non-contributing buildings, which detract from the historic character of the contributing buildings:
> Warehouse (1973)
> Single-family residence at 935 13 Ave. SE (1905)
> "1954 Annex" elevator (1954)
> Quonset shed (1947)
> Office building (1965)
>
> **Removal of contributing buildings:** Inconsistent with the Standards, the Project will demolish the "1936 Annex" Elevator and the 1936 office building, both of which are contributing buildings.
>
> **Conversion destroys historic integrity:** The conversion of the contributing buildings to residential (the "1935 Annex" Elevator and the 1936 headhouse) will affect the buildings' historical integrity such that they will no longer be eligible for inclusion on the National Register.

In 2006, MN SHPO drafted a Memorandum of Agreement (MOA) as a part of the federal Section 106 Review, which is required by the federal Environmental Assessment that the City prepared for the Project. The MOA includes the conclusion that, "the project will result in the removal and/or substantial alteration of the Bunge Elevator, which will constitute an adverse effect on historic properties." It specifies the measures that the City of Minneapolis is responsible to ensure are completed in order to sufficiently mitigate this adverse effect. The two primary measures are as follows and were completed by PPL:

- PPL will record the Bunge Elevator to the standards of the Minnesota Historic Property Record (MHPR), in consultation with MN SHPO. The completed documentation will be submitted to the MN SHPO for review and concurrence before beginning any demolition or site work on the Bunge Elevator area of the project.

- PPL will complete an article about the roles of the different types of grain elevators in Minneapolis in the context of the city's grain trade and flouring milling, with a particular focus on the Bunge Elevator. The article will take into account the Multiple Property Documentation Form "Grain Elevator Design on Minnesota," the Minnesota Historic Property Record on the Cepro Elevator in Minneapolis, and relevant material on the Minneapolis Grain Exchange. The article will be written by a historian who meets the Secretary of the Interior's Professional Qualifications Standards for Historian. The article will be written to the standards of the journal *Hennepin History*, or another scholarly journal, and will be submitted by PPL for publication. A copy of the article will be submitted to MN SHPO and the MHPC.

SITE DESCRIPTION AND PROPOSED USE

As previously mentioned, Phase III to convert the existing 1935 Annex Elevator and headhouse to residential was not realized in the previous project. PPL is now proposing to remove approximately 90 feet of the existing 115-foot tall, Annex Elevator and construct a new five story addition atop of the remaining grain elevator, convert the headhouse to lobby and amenity space and construct a new three-

story building with underground parking all to allow for 93 multiple-family dwelling units. The units will be a combination of studios, one-, two- and three-unit apartments.

REQUESTED FEEDBACK

The applicant has submitted an application to demolish a potential historic resource and is scheduled for a public hearing before the HPC on March 22, 2016. The applicant would like the opportunity to present the project to the HPC and both the applicant and staff are seeking feedback from the Commission on the proposed demolition.

CPED Heritage Preservation Application
Bunge Redevelopment

Statement of proposed use and description of the project.

The 1.5 acre site under consideration contains a remnant of what used to be the Bunge Grain Elevator. In 2007, a large bank of grain storage bins and several associated buildings were demolished and in their place were built two new multi-family apartment buildings and five new townhouses providing a total 90 units of affordable family housing. What remains of the former Bunge Grain business is too small to house most current industrial uses and its proximity to residential neighborhoods make industrial reuse even more unattractive. Our valuation of the site is estimated at $2,000,000 if the elevators are removed. The demolition of the remaining structures is estimated at $600,000.

The site's location and proximity to the University of Minnesota has made it easily accessible to trespassers and vandals, many of whom are students or their associates. Despite our continued best efforts to secure the buildings, they continue to attract illegal exploration and other activity, recently with tragic consequences. In addition, the buildings have been a magnet for graffiti since prior to our purchase and this continues to be an ongoing maintenance issue. Thus, the buildings present a constant safety concern and, sadly, a hazard to the community. As the buildings continue to stay vacant and further dilapidation occurs, these concerns will only increase.

When the first round of demolition was permitted for the site, it was our intention to adaptively reuse the head house and a bank of the storage bins as "loft style" condominiums. Our for-profit developer partner, who intended to do this work, ended up backing out of the deal as the for-sale market crashed in the Twin Cities and throughout the country. Our attempts to reuse the structures for affordable housing (which is our niche) have proven to be financially infeasible. We have since listed the property for-sale and have had little interest in the site.

Parties interested in the site typically see the existing structures as a liability and either forego the purchase or discount their offers substantially. The most recent interested party backed out due to the unlikelihood of receiving TIF and the likely delays in the demolition of the structures. Since it seems unlikely a buyer will emerge, PPL is applying for a demolition permit in order to allow for a reuse of the site which will increase the assessed value of the property; improve community safety, appeal and neighborhood stability. While we do not have a firm understanding of the final design of the site, it is clear that whatever we do, even if it involves preserving part of the existing structures, will be determined demolition and will thus require us to submit this application.

CPED Heritage Preservation Application
Bunge Redevelopment

Finding #14: Demolition of Historic Resource
Finding #14 states, "That the demolition is necessary to correct an unsafe or dangerous condition on the property, or that there are no reasonable alternatives to the demolition. In determining whether reasonable alternatives exist, the commission shall consider, but not be limited to, the significance of the property, the integrity of the property and the economic value or usefulness of the existing structure, including its current use, costs of renovation and feasible alternative uses."

The demolition of the Bunge grain elevator and head house is necessary as the continued existence of the buildings in their present state will cause an unsafe condition to persist. Prior to our purchase of the property in 2005, a young woman and her friends broke into the building, and she fell to her death. A second death occurred this past June 2015 when another group of young adults broke into the building and one of them fell and died of her injuries. Even after years of attempting to secure the building through reinforcing doors and windows with steel plates, installing fencing, displaying no trespassing signs, hiring security, sealing off entry points with concrete and demolishing a staircase that had been an illegal access point, trespassers and vandals continue to find the building attractive and go to great efforts to break into the building. Despite our diligent efforts to develop the site, we have been unsuccessful in finding a suitable project or a reasonable buyer.

In addition, the Bunge grain site has no reasonable alternatives which would maintain the existing structures as they are. Some "demolition," either in whole or in part, would be necessary to any reuse of the site. The alternatives were examined previously by the Historic Preservation Commission and this conclusion was drawn. As a result, we received approval to demolish other grain bins and affiliated structures in 2007. At that time it was determined the structures were historically significant but that alteration of the buildings for a residential use was in essence the same as demolition. The significance of the property would not seem to have increased from the time of that initial assessment. However, as result of the previous demolition and the intervening 10 years, it would seem that the property's integrity has been somewhat eroded, and our unsuccessful attempts to sell the property over the last five years would suggest that feasible alternative uses do not exist.

Helping people PPL *help themselves*

Cam Gordon
350 S. 4th Street, Room 307
Minneapolis, MN 55415

December 11, 2015

Dear Councilmember Gordon:

On behalf of Project for Pride in Living (PPL), I am writing to inform you of our intention to submit an application for approval by the City of Minneapolis to make rehabilitations and improvements to the site of the Bunge Grain Elevator located at 937 13th Avenue Southeast. PPL has owned the site for many years and has gone through several iterations of plans for improvements to the site and for its reuse as housing. Our current application would require some degree of demolition, either in part or in whole, to this historic site in order to allow for its reuse. At this time we do not have a final plan or design for the proposed development on the site, however we do know that any reuse will result in some level of demolition and, since the historic review is often lengthy, we wish to begin this process immediately. Once we know we can move forward with a new construction concept, we will continue to evolve drawings and specifications, working with the City and community.

We feel that the work PPL has done building housing on the adjacent site has proved to be a community asset and we hope for the same outcome in this phase of work. Please feel free to contact us with any questions or concerns.

Sincerely,

Chris Wilson
Director of Real Estate Development
Project for Pride in Living
1035 East Franklin Avenue
Minneapolis, MN 55404

Helping people PPL *help themselves*

Southeast Como Improvement Association
837 15th Avenue Southeast
Minneapolis, MN 55414

December 11, 2015

Dear SECIA members:

On behalf of Project for Pride in Living (PPL), I am writing to inform you of our intention to submit an application for approval by the City of Minneapolis to make rehabilitations and improvements to the site of the Bunge Grain Elevator located at 937 13th Avenue Southeast. PPL has owned the site for many years and has gone through several iterations of plans for improvements to the site and for its reuse as housing. Our current application would require some degree of demolition, either in part or in whole, to this historic site in order to allow for its reuse. At this time we do not have a final plan or design for the proposed development on the site, however we do know that any reuse will result in some level of demolition and, since the historic review is often lengthy, we wish to begin this process immediately. Once we know we can move forward with a new construction concept, we will continue to evolve drawings and specifications, working with the City and community.

We feel that the work PPL has done building housing on the adjacent site has proved to be a community asset and we hope for the same outcome in this phase of work. Please feel free to contact us with any questions or concerns.

Sincerely,

Chris Wilson
Director of Real Estate Development
Project for Pride in Living
1035 East Franklin Avenue
Minneapolis, MN 55404

Helping people PPL help themselves

Marcy Holmes Association
500 8th Avenue SE
Minneapolis, MN 55414

February 16, 2016

Dear Marcy Holmes Association members:

On behalf of Project for Pride in Living (PPL), I am writing to inform you that we submitted an application for approval by the City of Minneapolis to make rehabilitations and improvements to the site of the Bunge Grain Elevator located at 937 13th Avenue Southeast. PPL has owned the site for many years and has gone through several iterations of plans for improvements to the site and for its reuse as housing. Our current application would require some degree of demolition, either in part or in whole, to this historic site in order to allow for its reuse. At this time we do not have a final plan or design for the proposed development on the site, however we do know that any reuse will result in some level of demolition and, since the historic review is often lengthy, we wish to begin this process immediately. Once we know we can move forward with a new construction concept, we will continue to evolve drawings and specifications, working with the City and community.

We feel that the work PPL has done building housing on the adjacent site has proved to be a community asset and we hope for the same outcome in this phase of work. Please feel free to contact us with any questions or concerns.

Sincerely,

Chris Wilson
Director of Real Estate Development
Project for Pride in Living
1035 East Franklin Avenue
Minneapolis, MN 55404

Helping people PPL help themselves

Jacob Frey
350 S. 5th Street, Room 307
Minneapolis, MN 55415

February 16, 2016

Dear Councilmember Frey:

On behalf of Project for Pride in Living (PPL), I am writing to inform you that we submitted of an application for approval by the City of Minneapolis to make rehabilitations and improvements to the site of the Bunge Grain Elevator located at 937 13th Avenue Southeast. PPL has owned the site for many years and has gone through several iterations of plans for improvements to the site and for its reuse as housing. Our current application would require some degree of demolition, either in part or in whole, to this historic site in order to allow for its reuse. At this time we do not have a final plan or design for the proposed development on the site, however we do know that any reuse will result in some level of demolition and, since the historic review is often lengthy, we wish to begin this process immediately. Once we know we can move forward with a new construction concept, we will continue to evolve drawings and specifications, working with the City and community.

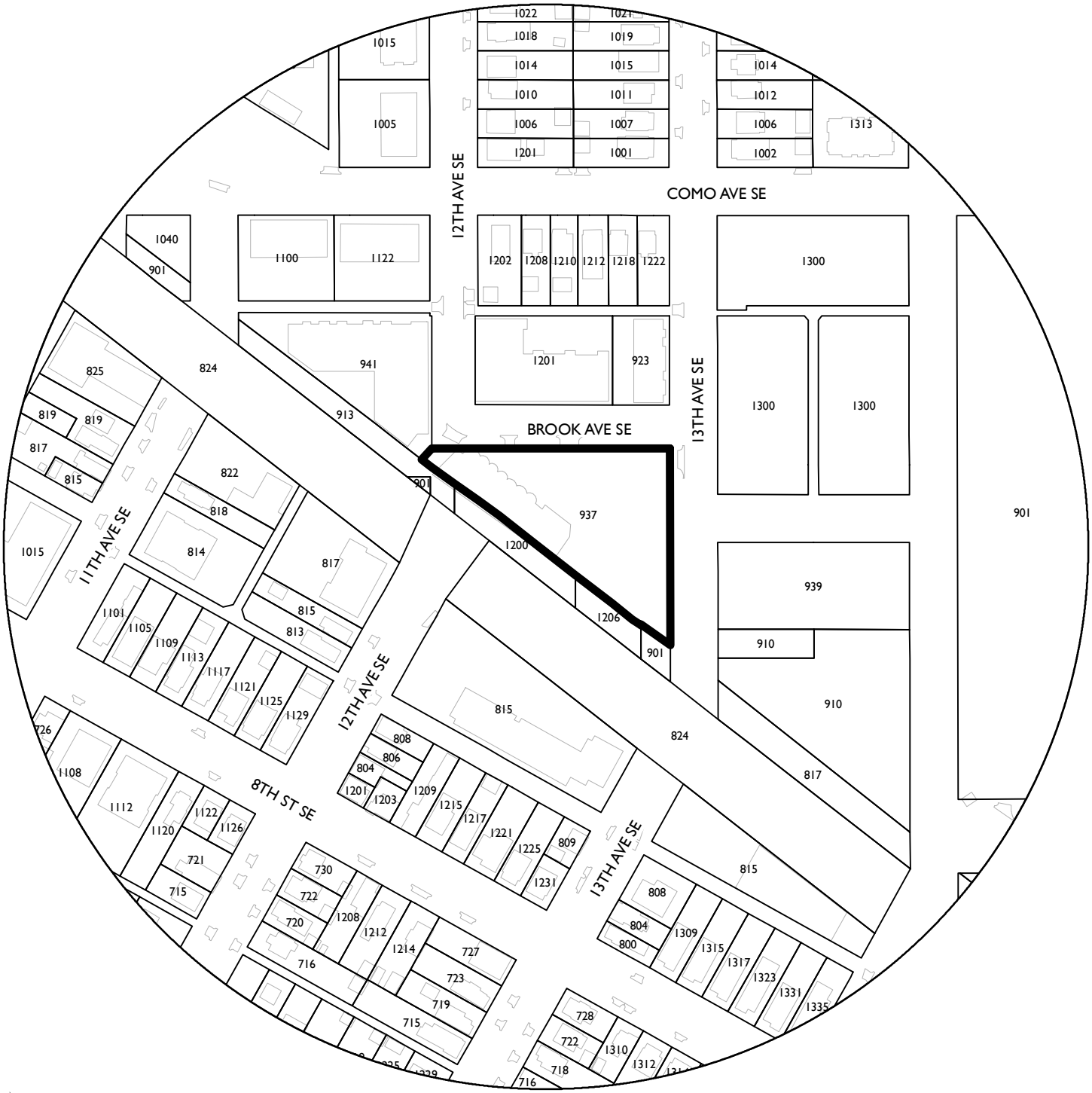
We feel that the work PPL has done building housing on the adjacent site has proved to be a community asset and we hope for the same outcome in this phase of work. Please feel free to contact us with any questions or concerns.

Sincerely,

Chris Wilson
Director of Real Estate Development
Project for Pride in Living
1035 East Franklin Avenue
Minneapolis, MN 55404

Project for Pride in Living — **2nd**

NAME OF APPLICANT — WARD



PROPERTY ADDRESS

937 13th Ave SE

FILE NUMBER

BZH-29047

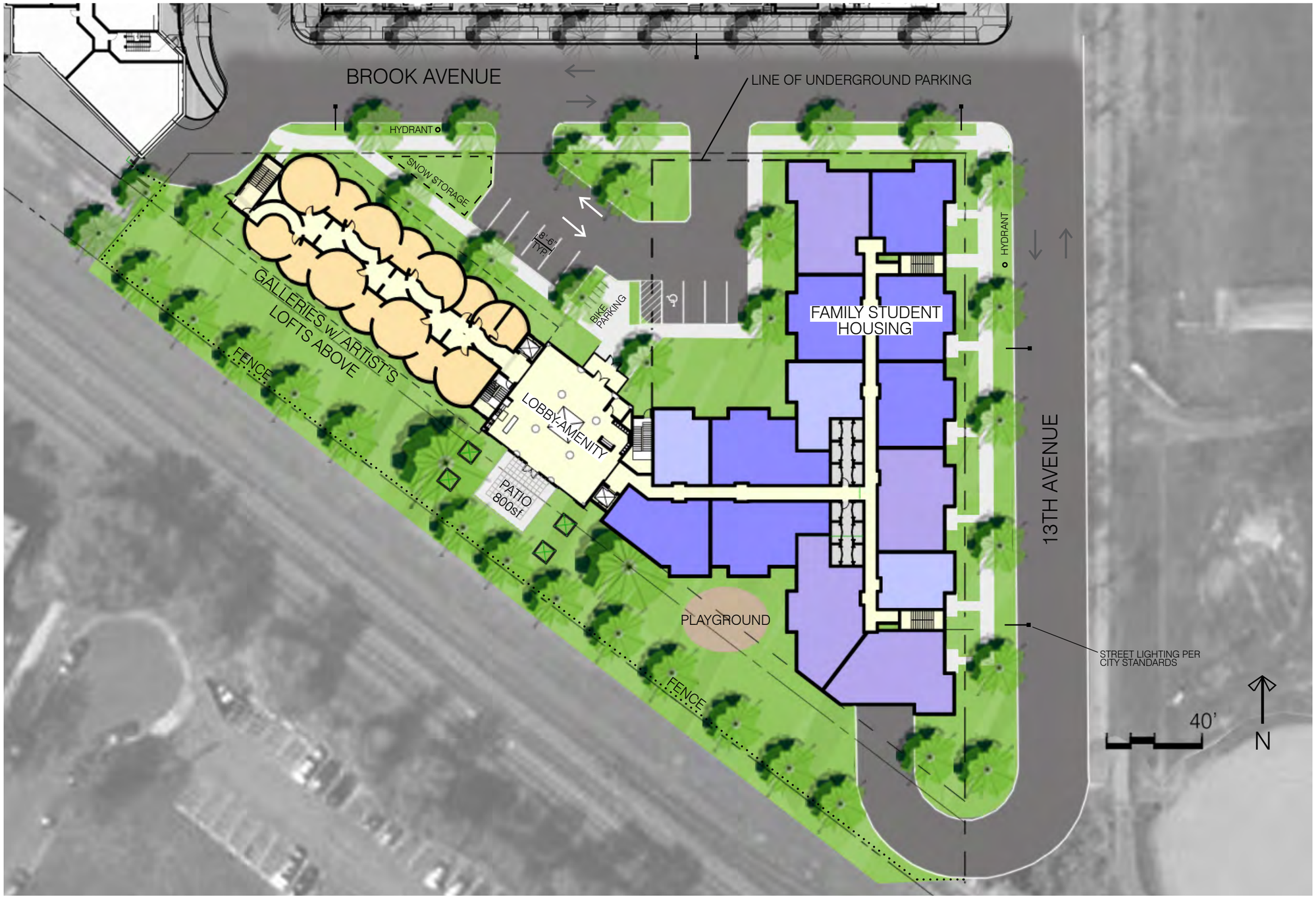
URBANWORKS ARCHITECTURE

PPL

Bunge Development

MINNEAPOLIS, MN | 10.14.2015 | 15-0009

EXISTING SITE PLAN



DEVELOPMENT SUMMARY

ARTIST'S LOFTS - 56,684 sf Gross
(8,767 sf Gross Footprint - Existing)

5 Levels
15 Studios +/- 535 SF each
20 One Bedrooms +/- 640 SF each
16 Two Bedrooms +/- 864 ~1,155 SF each

51 Units Total

FAMILY STUDENT HOUSING - 58,620 sf Gross
(19,538 sf Gross Footprint)

3 Levels
3 Studios +/- 580 SF each
9 One Bedrooms +/- 745 SF each
18 Two Bedrooms +/- 950~1,095 SF each
12 Three Bedrooms +/- 1,195~1260 SF each

42 Units Total

PARKING

10 Surface parking stalls (curbed)

109 Enclosed parking stalls -
(Family Student Housing Sublevels- **36,600 sf**)

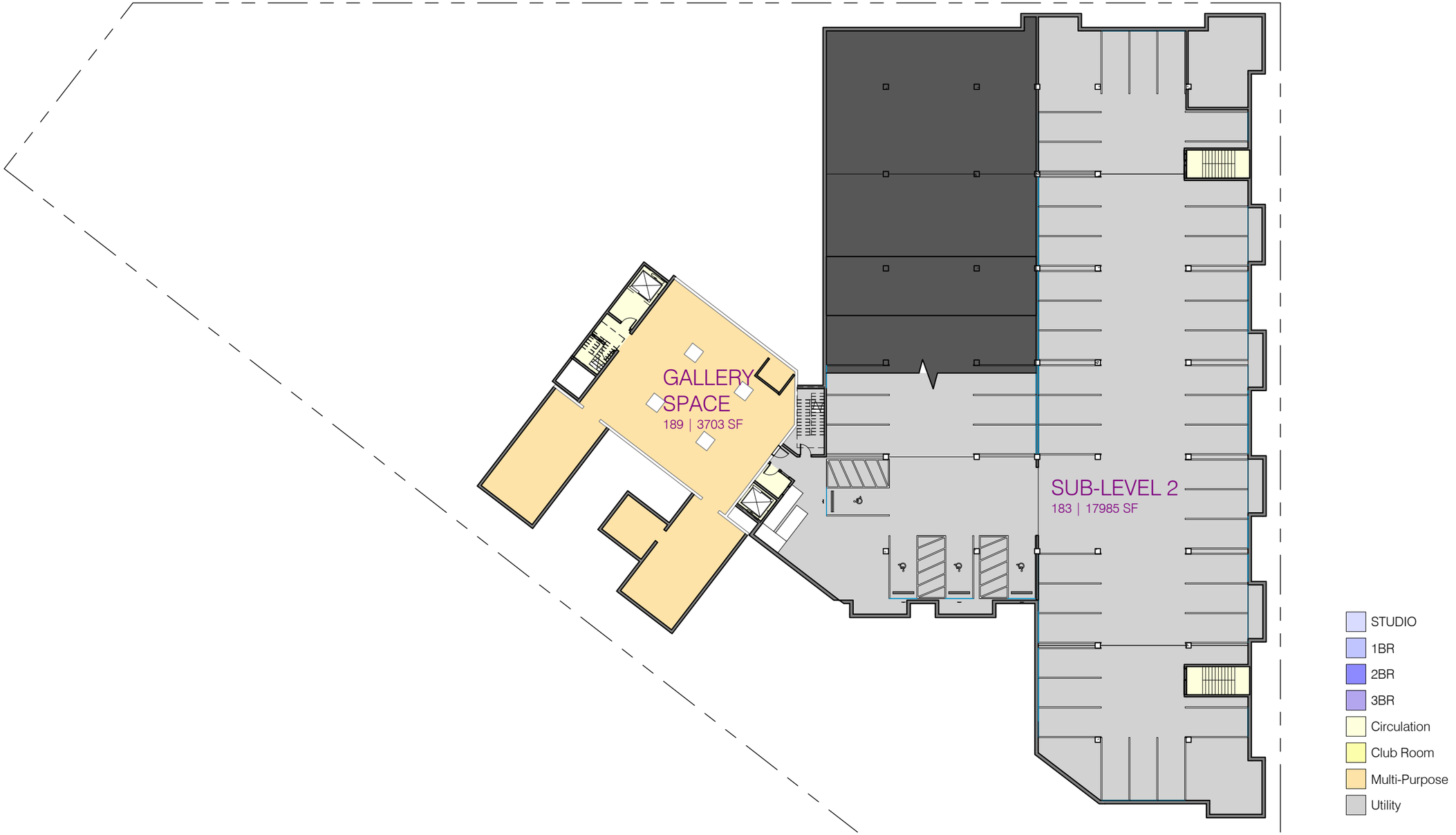
119 Parking Stalls Total

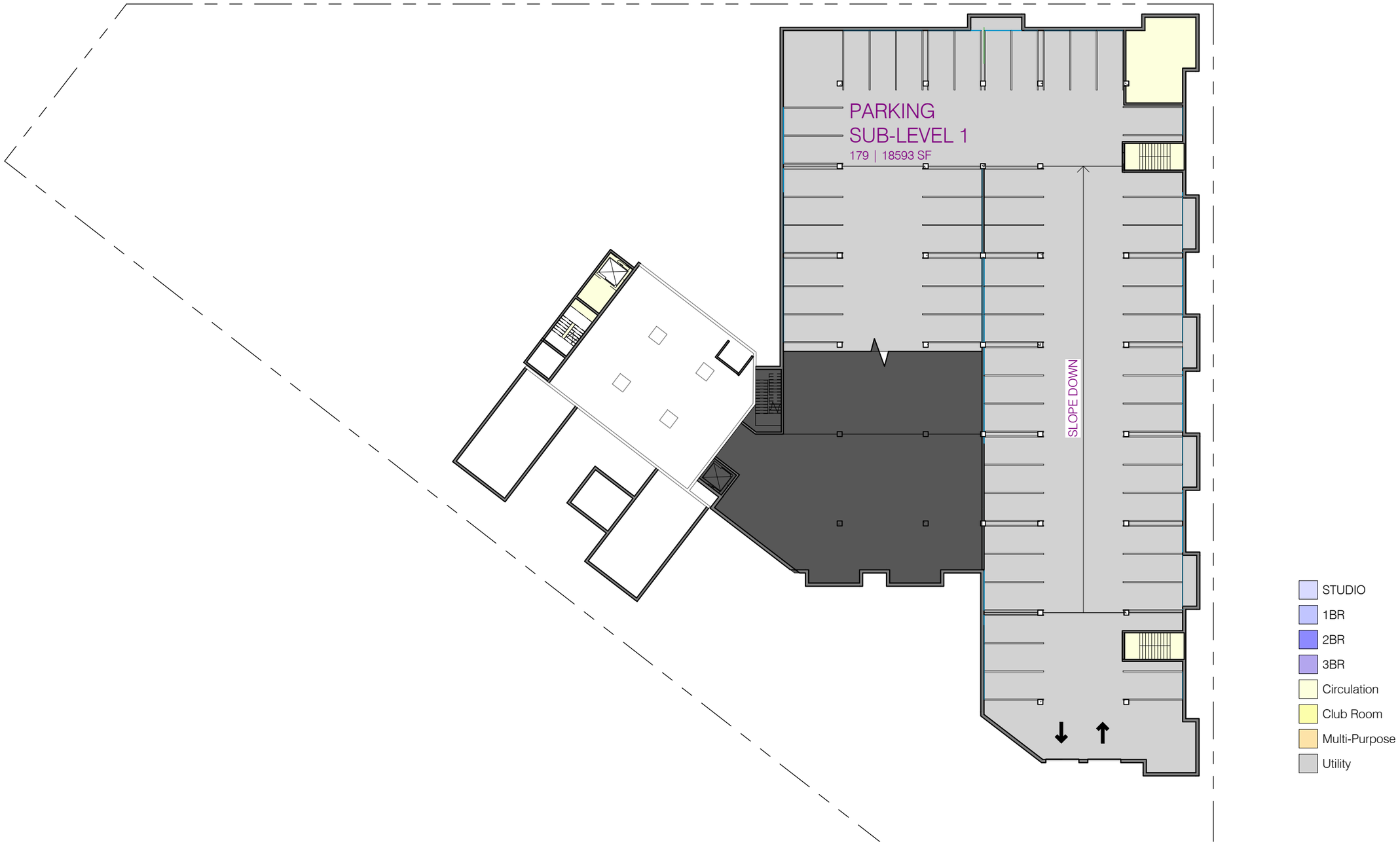
LOBBY / BUILDING ENTRY - NEW WINDOWS INSTALLED IN OLD RUINS WALL

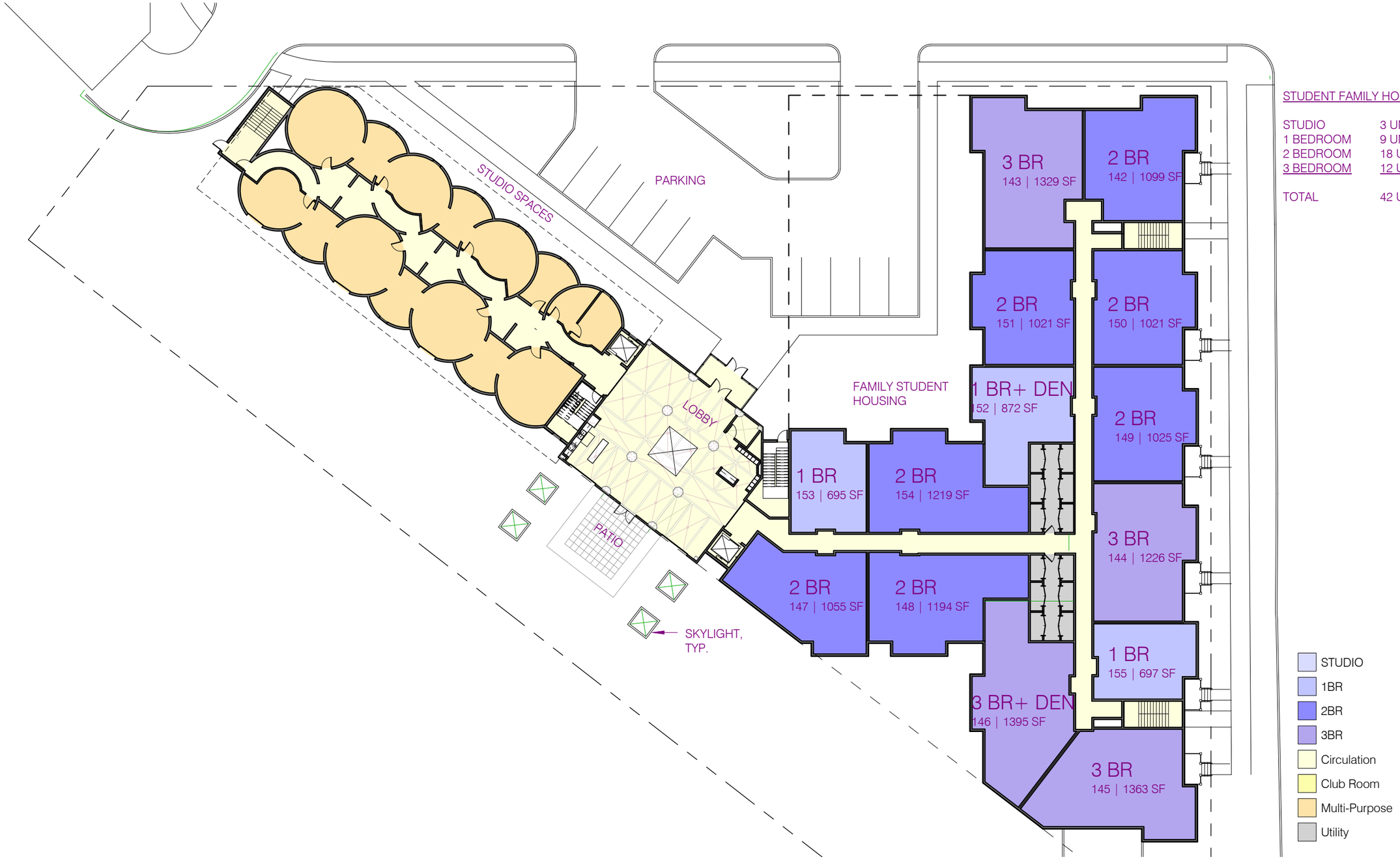
COMMON SPACE RENOVATED WITHIN CONCRETE SILO STRUCTURE

NEW HOUSING BUILDING BUILT ON TOP OF EXISTING HISTORIC STRUCTURE

BUILDING ENTRY ATTACHED TO HISTORIC STRUCTURE

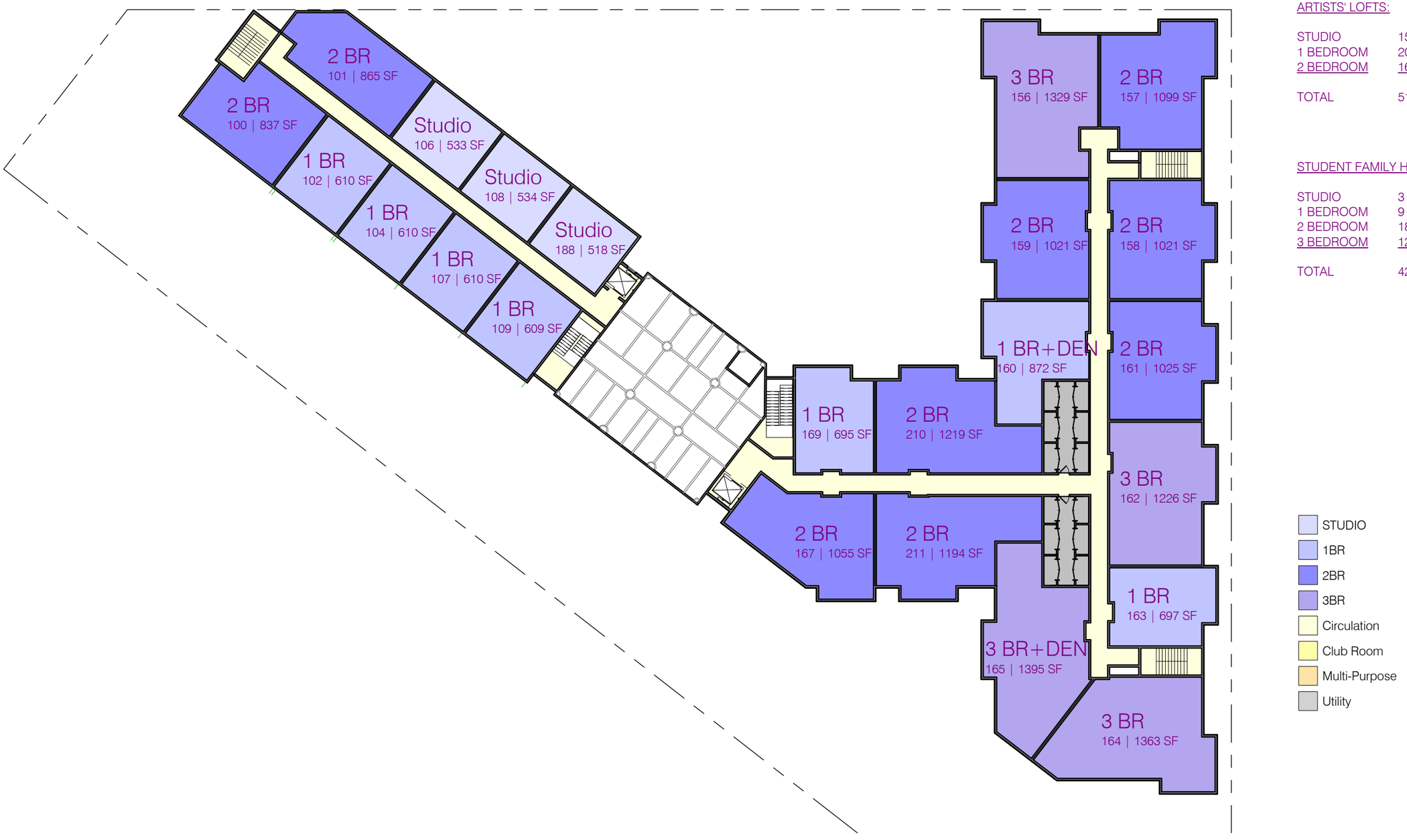

GALLERY
SPACE
189 | 3703 SF
SUB-LEVEL 2
183 | 17985 SF
STUDIO
1BR
2BR
3BR
Circulation
Club Room
Multi-Purpose
Utility


PARKING
SUB-LEVEL 1
179 | 18593 SF
SLOPE DOWN
STUDIO
1BR
2BR
3BR
Circulation
Club Room
Multi-Purpose
Utility



STUDENT FAMILY HOUSING

STUDIO	3 UNITS	580sf +/-
1 BEDROOM	9 UNITS	745sf +/-
2 BEDROOM	18 UNITS	950sf - 1095sf +/-
3 BEDROOM	12 UNITS	1195sf - 1260sf +/-
TOTAL	42 UNITS	



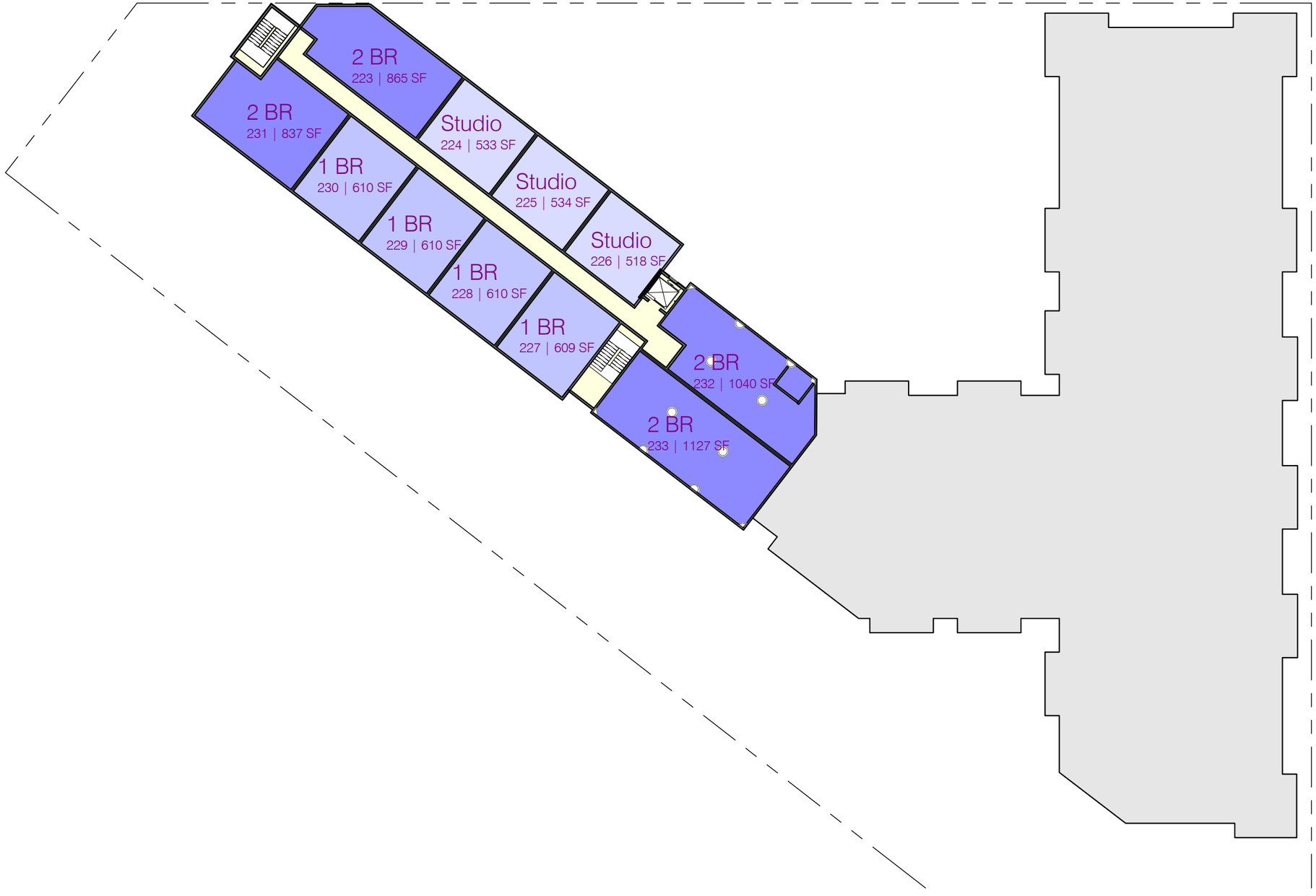
ARTISTS' LOFTS:

STUDIO	15 UNITS	535sf +/-
1 BEDROOM	20 UNITS	640sf +/-
2 BEDROOM	16 UNITS	864sf - 1155sf +/-
TOTAL	51 UNITS	

STUDENT FAMILY HOUSING

STUDIO	3 UNITS	580sf +/-
1 BEDROOM	9 UNITS	745sf +/-
2 BEDROOM	18 UNITS	950sf - 1095sf +/-
3 BEDROOM	12 UNITS	1195sf - 1260sf +/-
TOTAL	42 UNITS	

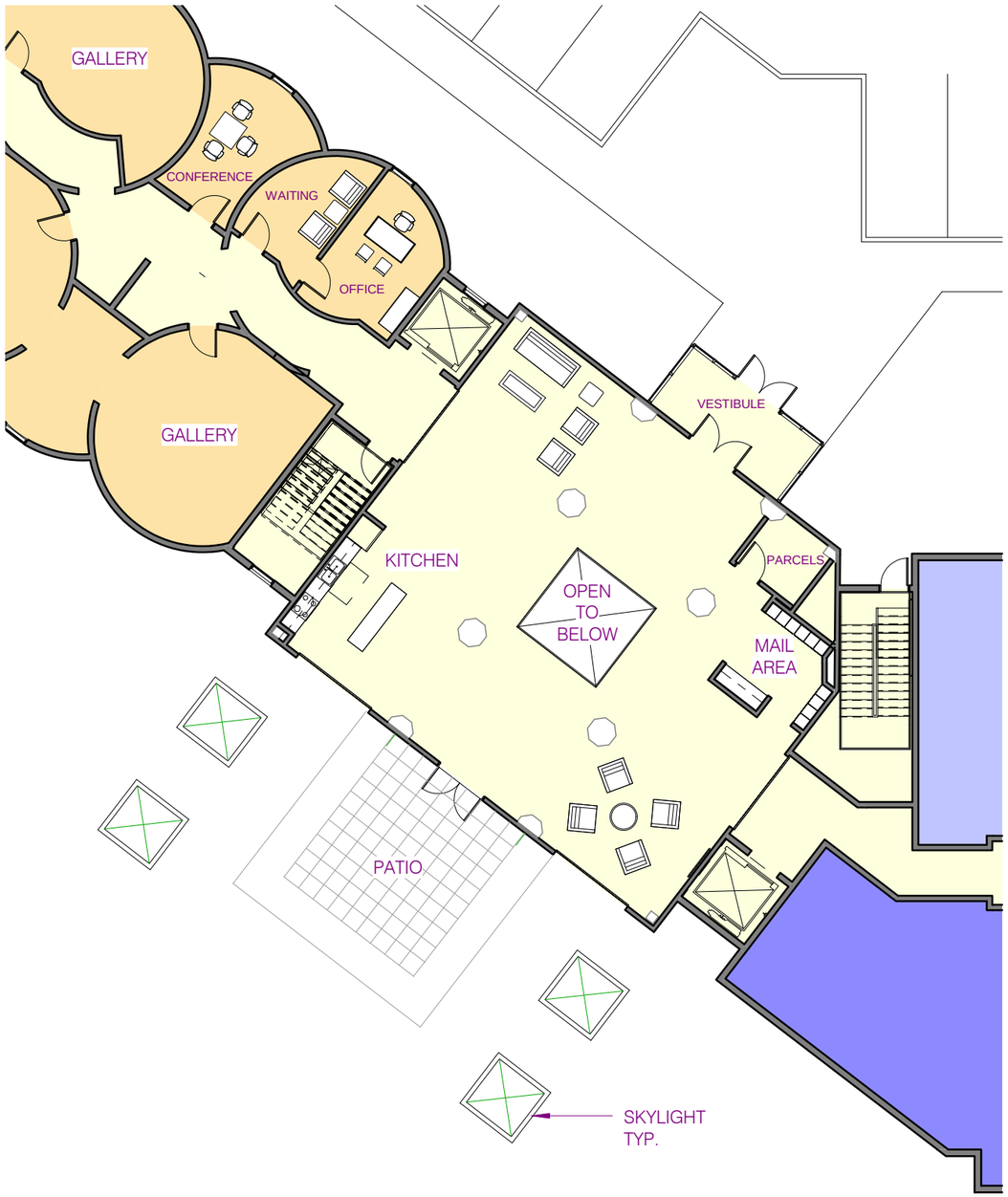
- STUDIO
- 1BR
- 2BR
- 3BR
- Circulation
- Club Room
- Multi-Purpose
- Utility



ARTISTS' LOFTS:

STUDIO	15 UNITS	535sf +/-
1 BEDROOM	20 UNITS	640sf +/-
2 BEDROOM	16 UNITS	864sf - 1155sf +/-
TOTAL	51 UNITS	

- STUDIO
- 1BR
- 2BR
- 3BR
- Circulation
- Club Room
- Multi-Purpose
- Utility


GALLERY
CONFERENCE
WAITING
OFFICE
GALLERY
VESTIBULE
KITCHEN
OPEN
TO
BELOW
PARCELS
MAIL
AREA
PATIO
SKYLIGHT
TYP.

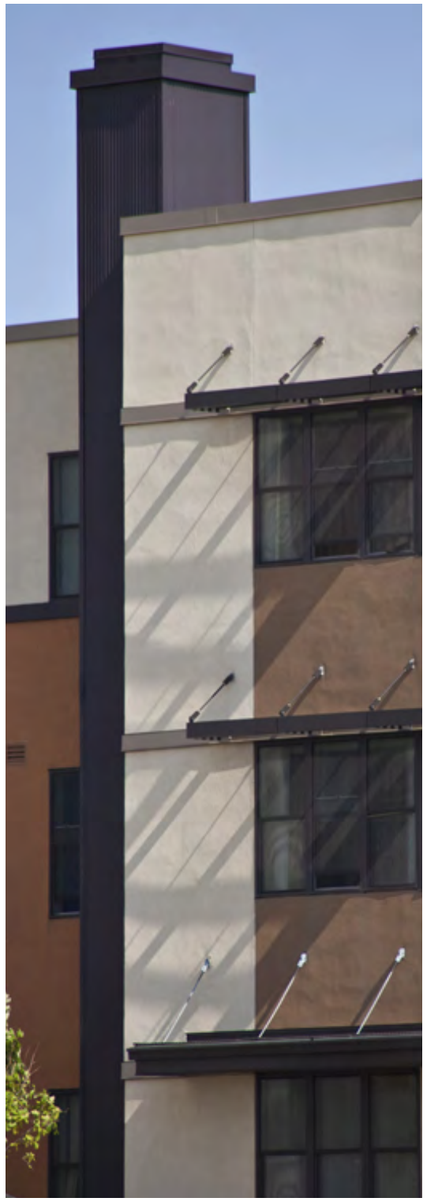
URBANWORKS ARCHITECTURE

PPL

Bunge Development

MINNEAPOLIS, MN | 10.14.2015 | 15-0009

CONCEPT IMAGE
BIRD'S EYE VIEW



Charlotte Commons Metal Panel Color

CONCEPT IMAGE
VIEW LOOKING SOUTHEAST

Photos of Property and Existing Structures:

North View

Northeast view

Northwest View

Southwest View

West View

Interior Views

PHASE I ARCHITECTURAL HISTORY SURVEY FOR THE VAN CLEVE COURT HOUSING PROJECT (BUNGE ELEVATOR), MINNEAPOLIS, HENNEPIN COUNTY, MINNESOTA

Submitted to:
Project for Pride in Living

Submitted by:
The 106 Group Ltd.

March 2006

PHASE I ARCHITECTURAL HISTORY SURVEY FOR THE VAN CLEVE COURT HOUSING PROJECT (BUNGE GRAIN ELEVATOR) MINNEAPOLIS, HENNEPIN COUNTY, MINNESOTA

SHPO No. 2005-2305
The 106 Group Project No. 06-04b

Submitted to:
Project for Pride in Living
1035 East Franklin Avenue
Minneapolis, MN 55404

Submitted by:
The 106 Group Ltd.
The Dacotah Building
370 Selby Avenue
St. Paul, MN 55102

Report Author:
Jeanne-Marie Mark, M.H.P.

March 2006

MANAGEMENT SUMMARY

The 106 Group Ltd. (The 106 Group) conducted a Phase I architectural history survey for the Van Cleve Court Housing Project (Bunge Grain Elevator), located in the Como neighborhood in southeast Minneapolis, Hennepin County, Minnesota in March 2006. The survey was conducted under contract with Project for Pride in Living (PPL), which intends to demolish portions of the Bunge Midway grain elevator and construct housing on the site. Since the project will be receiving funding through the U.S. Department of Housing and Urban Development (HUD), this project must comply with Section 106 of the National Historic Preservation Act of 1966, as amended. The purpose of the architectural history investigation was to determine whether the project area contains previously recorded or unrecorded buildings, structures, or other properties that may be eligible for listing on the National Register of Historic Places (NRHP). A separate study of the Bunge Midway grain elevator complex was completed by The 106 Group and has been submitted as a stand-alone evaluation (Stark 2006). William Stark, M.A., served as Principal Investigator for architectural history.

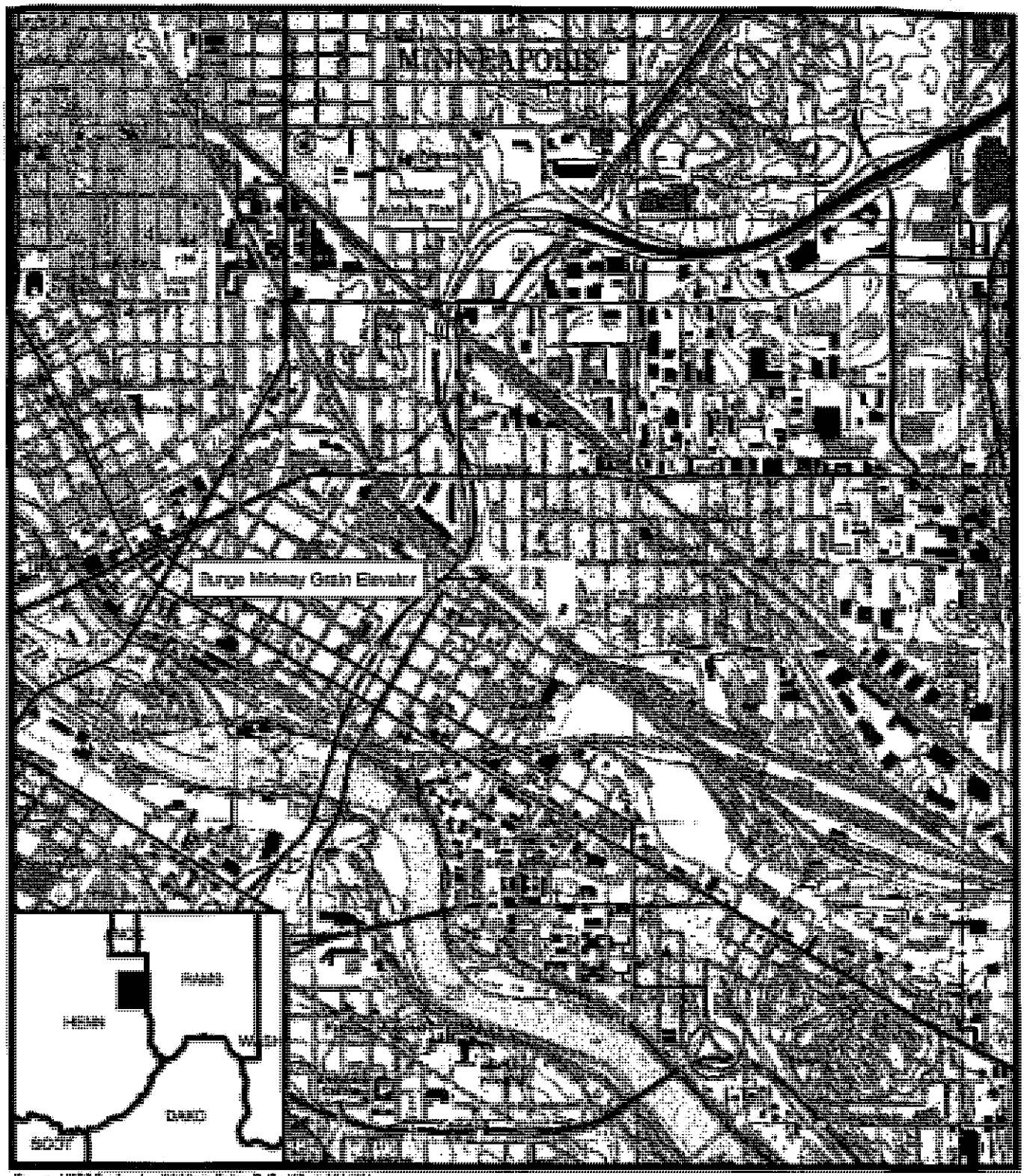
The project area is located in T29N, R24W, SW ¼ of the NE ¼ of Section 24 of Minneapolis, Hennepin County, Minnesota. The area of potential effect (APE) for architectural history accounts for any physical, auditory, or visual impacts to historic properties. The Phase I architectural history investigation consisted of a review of documents of previously inventoried properties and of surveys previously conducted within the project area, as well as a field survey to identify and document properties that are 45 years of age or older within the APE. The architectural history survey area includes approximately 27 acres (10.9 hectares).

During the Phase I architectural history survey, The 106 Group identified eight properties 45 years in age or older within the survey area. No properties have been previously listed on or determined eligible for the NPHP. The 106 Group recommends that the surveyed segment of the St. Paul, Minneapolis & Manitoba (StPM&M) Railway/Great Northern Railway (HE-MPC-5615) is *potentially* eligible for listing on the NRHP for its historical significance under NRHP Criterion A as an early rail line connecting Minneapolis with the agricultural lands of western Minnesota and beyond. The remaining seven properties surveyed in this investigation are recommended as not eligible for listing on the NRHP.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES



Van Cleve Court Housing Project (Burge Grain Elevator)
Phase I Architectural History Survey
Hennepin County, Minnnesota

Project Location and
Area of Potential Effect

0 0.25 0.5 0.75 1 Miles

Figure 1

2.0 METHODS

2.1 OBJECTIVES

The primary objectives of the Phase I architectural history investigation were to determine whether the area to be affected by the proposed project contains any buildings, structures, or other properties of 45 years in age or older and if those properties are potentially eligible for listing on the NRHP. All work was conducted in accordance with *The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* [48 Federal Register 44716-44740] (National Park Service [NPS] 1983).

2.2 AREA OF POTENTIAL EFFECT (APE)

The APE for architectural history was determined in consultation with the Minnesota SHPO, and it accounts for any physical, auditory, or visual impacts of the proposed undertaking to properties within the area. It includes all properties adjacent to the Bunge Midway grain elevator (see Figure 1). The Bunge grain elevator complex is within this APE, although its evaluation is separate from this report (see Stark 2006).

2.3 BACKGROUND RESEARCH

On March 6, 2006, prior to the start of the field survey, staff from The 106 Group conducted background research for information on previously inventoried properties and on surveys previously conducted within the project area.

2.3.1 Building Permit Research

Copies of building permits for the potentially eligible properties in the APE were obtained from the Inspections Office at the Minneapolis Public Service Center.

2.3.2 Minnesota Historical Society Library Research

Research on the history of Van Cleve Park, the Como Neighborhood, and the Great Northern Railway Company was conducted at the Minnesota Historical Society (MHS) Library. Resources examined included historic photographs of the park from the Visual Resource Database, as well as various documents on the Minneapolis Park System and the Great Northern Railway Company.

2.3.3 Minneapolis Parks and Recreation Board

Information on the history of Van Cleve Park was requested from the Minneapolis Parks and Recreation Board. Annual reports dating back to 1891 were supplied and evaluated.

3.0 PREVIOUS INVESTIGATIONS

3.1 PREVIOUS ARCHITECTURAL HISTORY STUDIES

No architectural history surveys have been conducted within the survey area.

No properties have been inventoried within the survey area.

5.0 RESULTS

A total of eight properties over 45 years in age were recorded within the project APE, in addition to the grain elevator complex (Figure 2; Tables 1 and 2). No properties are listed on or have been previously determined eligible for listing on the NRHP. Single-family houses, dating from the early twentieth century and Van Cleve Park dominated the survey area. Other property types included the St. Paul Minneapolis & Manitoba Railway (StPM&M) segment of the Great Northern Railway tracks.

Based on Phase I evaluation, one property has been identified as potentially eligible for listing on the NRHP and is presented in Table 1. Information on the remaining seven properties, recommended not eligible for NRHP listing, is presented in Table 2. Discussion of the individual properties follows.

TABLE 1. PROPERTIES RECOMMENDED POTENTIALLY ELIGIBLE FOR LISTING ON THE NRHP

Field No.	Inventory No.	Address	T	R	S	¼ Sec	Property Type	Date
8	HE-MPC-5615	Great Northern Railway Track	29	24	24	SW-NE	Railway	1867-1871

TABLE 2. PROPERTIES RECOMMENDED NOT ELIGIBLE FOR LISTING ON THE NRHP

Field No.	Inventory No.	Address	T	R	S	¼ Sec	Property Type	Date
1	HE-MPC-5608	1202 Como Avenue SE	29	24	24	SW-NE	House	1909
2	HE-MPC-5609	1208 Como Avenue SE	29	24	24	SW-NE	House	1919
3	HE-MPC-5610	1210 Como Avenue SE	29	24	24	SW-NE	House	1900
4	HE-MPC-5611	1212 Como Avenue SE	29	24	24	SW-NE	House	1900
5	HE-MPC-5612	1218 Como Avenue SE	29	24	24	SW-NE	House	1907
6	HE-MPC-5613	1222 Como Avenue SE	29	24	24	SW-NE	House	1905
7	HE-MPC-5614	1300 Como Avenue SE	29	24	24	SW-NE	Park	1890

5.1 PROPERTIES RECOMMENDED AS POTENTIALLY ELIGIBLE FOR THE NRHP

One property, the St. Paul Minneapolis & Manitoba (StPM&M)/Great Northern Railroad segment of the Great Northern Railway (HE-MPC-5615), is recommended as potentially eligible for listing on the NRHP (see Figure 2).

5.1.1 St. Paul Minneapolis & Manitoba/Great Northern Railroad, HE-MPC-5615

Description: This segment of the StPM&M/Great Northern Railway runs lies south of the Bunge Grain Elevator within a mostly residential neighborhood of southeast Minneapolis (Figure 3). At this location, the railroad is comprised of seven sets of tracks on a wide rail bed leading to the congested rail center of Minneapolis. The tracks are still active (Figure 3).

FIGURE 3. HE-MPC-5615, FACING NW

History: In 1857, Minnesota had over 150,000 inhabitants and a rapidly growing territory, thus the need for railroads was significant. It was during this year that the Minnesota Enabling Act was passed, providing extensive land grants to aid in the construction of Minnesota's railroads. It was hoped that these land grants would stimulate an era of progress in Minnesota by marketing the grain raised in the Mississippi and tributary river valleys through the use of railroad companies (Great Northern Railway Company 1969:7-9). By enhancing agricultural production, the railroad system would also increase the profits of farmers and rural clients. Additionally, the railroad would promote immigration onto used farmland (Dickman 1977:232).

5.2 PROPERTIES RECOMMENDED AS NOT ELIGIBLE FOR THE NRHP

Seven properties investigated at the Phase I level are recommended as not eligible for listing on the NRHP (see Figure 2; Table 2).

5.2.1 House, HE-MPC-5608
1202 Como Avenue SE, Minneapolis

Description: This 1909 house is set at the southeast corner of Como Avenue and 12th Street (Figure 4). The two-story front gable house has a rectangular plan and rests on a concrete block foundation. The main body of the structure is clad in stucco. The roof is covered in asphalt shingles, and a brick chimney is located on the interior slope. The hipped, full-width one-story porch on the front façade is enclosed with aluminum siding and the entrance is offset to the left. Fenestration consists of 1/1 double-hung windows of various sizes. A large, single sash window is flanked by two smaller, 1/1 double-hung windows to the right of the front door.

FIGURE 4. HE-MPC-5608, FACING SW

History: According to Minneapolis Building Permit Records, the construction date of this building is 1909. In 1965, interior alterations were made and the entrance was remodeled.

Significance: This property does not contribute to significant broad patterns of history, is not known to be associated with persons important in the past, is not architecturally distinguished, and has not yielded, nor is it likely to yield, information important in prehistory or history.

Recommendation: This property is recommended as not eligible for listing on the NRHP.

5.2.3 House, HE-MPC-5610
1210 Como Avenue SE, Minneapolis

Description: This circa 1900, front-gabled house is set on the south side of Como Avenue (Figure 6). The two-story, rectangular-plan house rests on a concrete block foundation. The main body of the house is clad in stucco. The roof is covered in asphalt shingles, and a brick chimney is located on the interior ridge. The front gable contains varying thick/thin vertical boards. A hipped, full-width one-story porch is enclosed with wide, vertical planks covering the upper body and stucco on the lower. The entrance is offset to the left. Fenestration consists of 1/1 double-hung windows of various sizes, with a large single sash flanked by 2/2 vertical sash windows located to the right of the entrance. Applied shutters are located on the upper level of the front façade. A bay window is located on the lower level of the east side of the house, as well as a gable dormer containing a fanlight.

FIGURE 6. HE-MPC-5610, FACING SW

History: According to Minneapolis Building Permit Records, the construction date of this building is 1900.

Significance: The property is a common building type and alterations to the building have resulted in compromised historical integrity. The property does not contribute to significant broad patterns of history, is not believed to be associated with persons important in our past, and is not architecturally distinguished.

Recommendation: This property is recommended as not eligible for listing on the NRHP.

5.2.5 House, HE-MPC-5612
1218 Como Avenue SE, Minneapolis

Description: This 1907, flared-front gabled house in set on the south side of Como Avenue (Figure 8). The one-and-a-half story house is square in plan, and rests on an ashlar concrete block foundation. The main body of the house is clad in asbestos siding. The roof is covered in asphalt shingles, and a brick chimney is located on the roof ridge. A hipped, full-width one-story porch is enclosed on the front façade with wrap-around double-hung windows and the entryway is offset to the right. Fenestration consists of 1/1 double-hung windows of various sizes on the sides of the house, and a large window in the front gable consisting of 1/1 vertical sidelights flanking a fixed sash over a 1/1 double-hung window.

FIGURE 8. HE-MPC-5612, FACING SW

History: According to Minneapolis Building Permit Records, the construction date of this building is 1907.

Significance: The property is a common building type and alterations to the building have resulted in compromised historical integrity. The property does not contribute to significant broad patterns of history, is not believed to be associated with persons important in our past, and is not architecturally distinguished.

Recommendations: This property is recommended as not eligible for listing on the NRHP.

5.2.7 Park, HE-MPC-5614
1300 Como Avenue SE, Minneapolis

Description: Van Cleve Park is part of the Minneapolis Park and Recreation Board system of parks (Figure 10). It is located between the 13th and 15th Avenue blocks on the south side of Como Avenue. The park is generally flat with a scattering of trees. Within the Van Cleve Park are a number of recreational facilities, including a hockey/ice rink, a wading pool, picnic area, tot lot and playground, baseball and soccer fields, and a basketball and tennis court. A one-story, brick recreation center built in 1971, is located on the park's southeastern end. Additionally, a large sculpture containing chimes is located at the northeast corner of the park.

FIGURE 10. HE-MPC-5614, FACING W

History: The Board of Park Commissioners of Minneapolis acquired Van Cleve Park, originally conceived under the name Second Ward Park, for $75,000 in 1890 (Wirth 1945:63). The two-block parcel comprising of seven acres was located in the residential Como Neighborhood. The urban Van Cleve Park consisted of green space with trees, shrubs, winding paths, a shallow pond and a fountain (Southeast Como Improvement Association 2006) (Figure 11). Annual reports for the park date back to 1891, with the first record referring to the skating rink and warming house within the park boundaries. Van Cleve Park was one of five parks in Minneapolis with a skating rink and warming house during the winter of 1890-1891. In 1893, the Committee on Nomenclature recommended the park name be changed to Van Cleve Park to honor both Civil War General Horatio P. Van Cleve and his wife, Charlotte O. Van Cleve of Minneapolis (Minneapolis Parks and Recreation Board 1893). During the spring of 1906 the Board of Park Commissioners installed merry-go-rounds, and a sand box; swings were added a

6.0 SUMMARY AND RECOMMENDATIONS

During March 2006, The 106 Group conducted a Phase I architectural history investigation for the Van Cleve Court Housing (Bunge Grain Elevator) project, examining all properties adjacent to the Bunge Midway grain elevator of southeast Minneapolis, Minnesota. A separate study was completed for the Bunge Midway grain elevator itself, and it was recommended as eligible for the NRHP (Stark 2006).

The 106 Group recommends that the segment of the StPM&M Railway (HE-MPC-5615) is *potentially* eligible for listing on the NRHP for its historical significance under NRHP Criterion A as an early rail line connecting Minneapolis with the agricultural lands of western Minnesota and beyond. Although further study may be necessary to fully determine the significance of this property, The 106 Group recommends that the property be considered eligible for the NRHP for the purposes of this study. The proposed project would include the demolition of the track shed and the possible removal of the two spur tracks adjacent to the grain elevator. This spur line, however, is owned by Union Pacific, and is not part of the BNSF mainline. The mainline itself would not be directly affected by the proposed project. The 106 Group recommends that the construction of the Van Cleve Housing Project would have no impact on the significant historical aspect of the railway – its route – and would not have an adverse effect to this historic property.

The remaining seven properties surveyed in this investigation are recommended as not eligible for listing on the NRHP.

APPENDIX A: PROJECT PERSONNEL

PHASE II ARCHITECTURAL HISTORY INVESTIGATION OF THE BUNGE MIDWAY GRAIN ELEVATOR, MINNEAPOLIS, HENNEPIN COUNTY, MINNESOTA

Submitted to:
Project for Pride in Living

Submitted by:
The 106 Group Ltd.

March 2006

PHASE II ARCHITECTURAL HISTORY INVESTIGATION OF THE BUNGE MIDWAY GRAIN ELEVATOR, MINNEAPOLIS, HENNEPIN COUNTY, MINNESOTA

The 106 Group Project No. 06-04

Submitted to:

Project for Pride in Living
1035 East Franklin Avenue
Minneapolis, MN 55404

Submitted by:

The 106 Group Ltd.
The Dacotah Building
370 Selby Avenue
St. Paul, MN 55102

Report Author:
William E. Stark, M.A.

March 2006

MANAGEMENT SUMMARY

The 106 Group Ltd. conducted a Phase II architectural history investigation of the Bunge Midway grain elevator (HE-MPC-7802), located at 932 12th Avenue Southeast in Minneapolis, Hennepin County, Minnesota in January 2006. The investigation was conducted for Project for Pride in Living (PPL), which intends to demolish portions of the building to construct housing. Since the project will be receiving funding from the U.S. Department of Housing and Urban Development (HUD), this project must comply with Section 106 of the National Historic Preservation Act of 1966, as amended.

The project area is located in T29N, R24W, SW ¼ of the NE ¼ of Section 24. The Phase II architectural history investigation consisted of field survey of the Bunge Midway grain elevator, development of a historical context, and secondary and primary research on the property. William E. Stark, M.A. served as Principal Investigator.

The Bunge Midway grain elevator is recommended as eligible for listing on the National Register of Historic Places (NRHP) under Criterion A, contributing to the understanding of broad patterns of history. The construction of the extant additions of 1935 and 1936 were the major contributors to the increased storage capacity of Minneapolis elevators, making the city the largest grain storage handling facility in North America, and possibly the world. Minneapolis would be able to hold this position for at least the next three decades. The capacity for grain storage was critically interlaced with the city's ability to serve as a grain exchange and financial center, representing an important aspect of the city's economy. For this reason, the Bunge Midway grain elevator is recommended as significant under NRHP Criterion A in the area of commerce. The complex retains most of the key elements from the 1930s expansion and later additions do not significantly diminish its historical integrity. Therefore, the property is recommended as eligible for listing on the NRHP.

The redevelopment plan should seek to avoid adverse effects to the historic property, or to mitigate for unavoidable adverse effects.

TABLE OF CONTENTS

LIST OF FIGURES

1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE OF INVESTIGATION

The 106 Group Ltd. (The 106 Group) conducted a Phase II architectural history investigation of the Bunge Midway grain elevator (HE-MPC-7802), located at 932 12th Avenue Southeast in Minneapolis, Hennepin County, Minnesota in January 2006. The investigation was conducted for Project for Pride in Living (PPL), which intends to demolish portions of the grain elevator and construct housing on the site. Since the project will be receiving funding through the U.S. Department of Housing and Urban Development (HUD), this project must comply with Section 106 of the National Historic Preservation Act of 1966, as amended.

The project area is located in T29N, R24W, SW ¼ of the NE ¼ of Section 24 (Figure 1). The current study was limited to an investigation of the Bunge Midway grain elevator only. Additional survey will be necessary to address potential effects resulting from the undertaking to properties beyond the grain elevator complex. An area of potential effect (APE) should be determined in consultation with the Minnesota State Historic Preservation Office (SHPO).

The tasks performed for this Phase II investigation included: (1) background research to develop the history of the Bunge Midway grain elevator and a historical context within which to analyze the property's significance and integrity; (2) a field visit to physically inspect and photograph the property; and (3) an evaluation of the Bunge Midway grain elevator for its eligibility for listing on the National Register of Historic Places (NRHP). William E. Stark, M.A. served as Principal Investigator.

The following report details the methods, results, and recommendations for the Phase II architectural history investigation of the Bunge Midway grain elevator. Chapter 2 presents a discussion of the methodologies used for the investigation. Chapter 3 provides a historical overview of the elevator and the grain trade and storage industry in Minneapolis. Chapter 4 discusses the results of the investigation. Chapter 5 presents recommendations for the Bunge Midway grain elevator. The bibliography for the report follows Chapter 5. Appendix A is a list of project personnel.

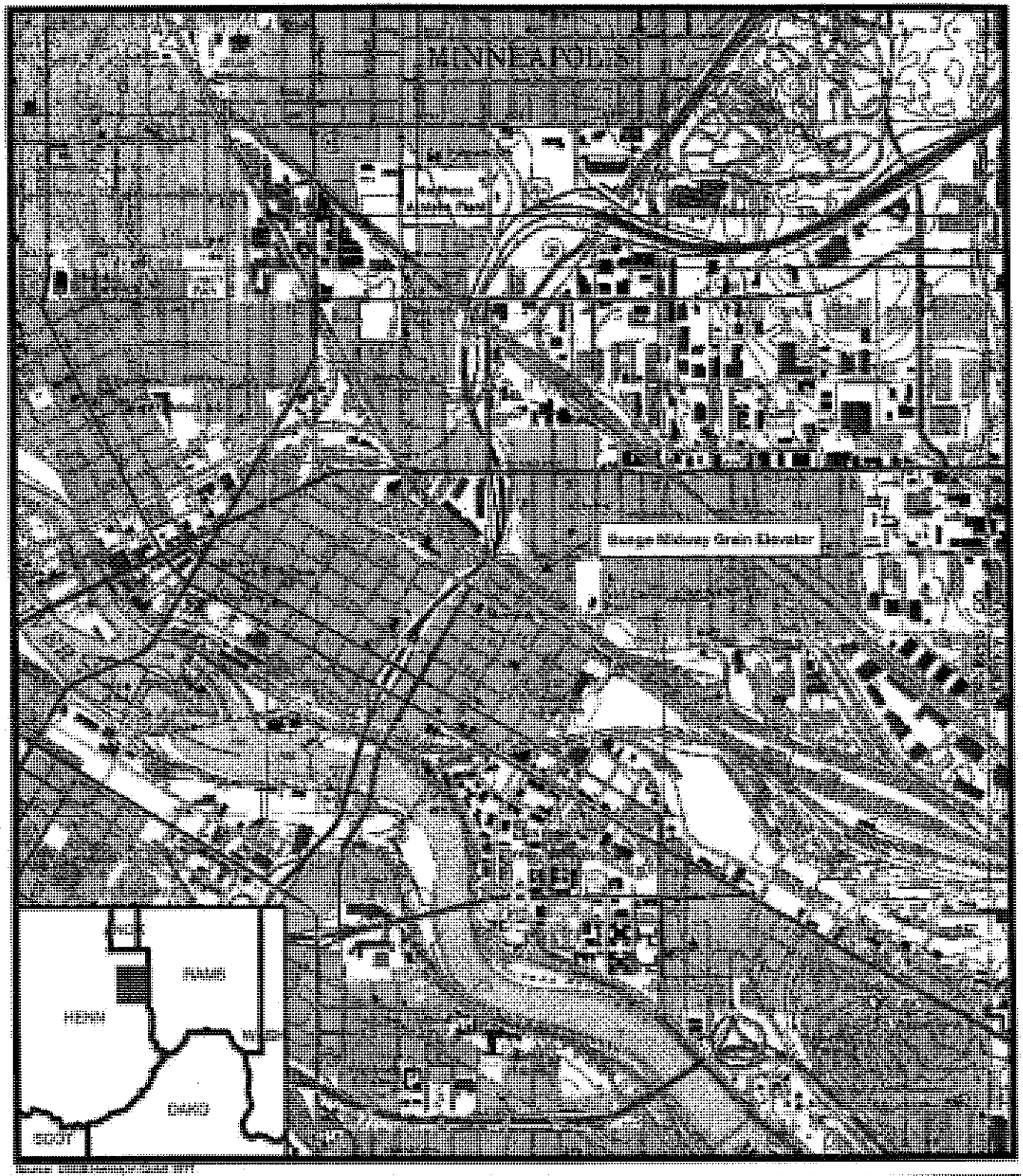
1.2 PROJECT DESCRIPTION

The proposed project, Van Cleve Court housing project, is located on a three-acre site in the Como neighborhood of Minneapolis. The site, formerly occupied by Bunge Corporation, houses a grain elevator headhouse and storage tanks, office space and other ancillary facilities, and a single-family dwelling, adjacent, but unrelated to the grain elevator complex. The site has been vacant for two years. The proposed project would preserve the headhouse as a significant neighborhood landmark, and replace the remaining structures with five new buildings. The project's 87 rental units will be spread

over two buildings. The other three buildings and the preserved headhouse will contain 92 units of for-sale housing. The total project will reach households of varied income levels.

The currently vacated 12th Avenue SE alignment will be extended into the site and a street running parallel to Como Avenue will also be created. Along 13th Avenue SE there will be two sets of for-sale townhouses: Buildings C & G. Habitat for Humanity will be constructing Building C, five single loaded townhouses with two tuck-under garages. The eleven double loaded townhouses, Building G, will be for sale and have drive under parking. South of the street parallel to Como Avenue are Buildings D/E, F, & G, which share 115 underground parking spots. Building D/E, a four-story condo development, contains 48 units of for sale housing. The preserved headhouse will contain 28 units of market rate housing.

Two new construction buildings will contain rental housing, in which ownership will be held by a limited partnership, in which both Cabrini House and PPL are partners. To the east of 12th Avenue SE, Building B, a three story building, will contain 35 units of housing and have 38 spots of underground parking. To the west of 12th Ave SE, Building A, a four story building, will contain 52 units of rental with 47 underground parking spots.



Bunge Midway Grain Elevator
Phase II Architectural History Evaluation
Hennepin County, Minnesota

Project Location

0 0.25 0.5 0.75 1 Miles

Figure 1

2.0 METHODS

2.1 OBJECTIVES

The purpose of the Phase II architectural history investigation was to determine if the Bunge Midway grain elevator is eligible for listing on the NRHP. All work was conducted in accordance with *The Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation* [48 Federal Register 44716-44740] (National Park Service [NPS] 1983).

2.2 AREA OF POTENTIAL EFFECT

The current study was limited to an investigation of the Bunge Midway grain elevator only.

2.3 BACKGROUND RESEARCH

Research was conducted in order to create a historical context within which to evaluate the elevator's significance and integrity. Research was performed at the following repositories: the Minnesota Historical Society (MHS), the Minnesota SHPO, the Minneapolis Heritage Preservation Commission (HPC), the City of Minneapolis, and the University of Minnesota. Research included examining primary and property-specific resources, such as building permits and Sanborn fire insurance maps.

2.3.1 Grain Elevator Sources

A variety of primary archival materials were gathered on Minneapolis grain elevators as part of the Minneapolis Community Development Agency's (MCDA) grain elevator study in 1997 for the Minneapolis HPC. During that project, a document file was created for each elevator in the study. The file includes City inspections permit record indexes, assessor cards, real estate tax data, some Sanborn fire insurance maps, and selected building permits. Based on these records, a brief narrative was prepared for each elevator site for the MCDA report. The narratives include information on the land owner, date of elevator construction (for both demolished and extant structures), construction materials, dimensions, and type of elevator. In addition, land use maps and photographs of each elevator were included as part of this project.

The University of Minnesota library offered such resources as the Minneapolis Chamber of Commerce Annual Reports, which outline the level of grain trade activity in the City, as well as the elevators in operation. Other resources included grain trade journals contemporary with the Bunge Midway grain elevator.

An examination of NRHP-nominated and previously recorded reinforced concrete grain elevators in Minneapolis was performed at SHPO and the Minneapolis HPC to provide comparative material for assessing the historical integrity and significance of the Bunge Midway grain elevator.

2.3.2 Stewart-Cepro Grain Elevator Evaluation

The current study relied heavily upon the 2001 evaluation of the Stewart-Cepro Grain Elevator study, co-authored by the Principal Investigator, Will Stark, and Kristen Zschomler (Stark and Zschomler 2001). The Stewart-Cepro study shared many contextual elements with the present study. The Principal Investigator gratefully acknowledges the contribution of Zschomler to the evaluation of the Bunge Midway elevator by way of the valuable insights she made to the earlier investigation.

2.4 FIELD METHODS

The Bunge Midway grain elevator was photographed and physically examined during the Phase II investigation. Long-time Bunge employee and former elevator superintendent, Tom Hamilton, provided a tour of the elevator's interior.

2.5 INVENTORY FORM

A Minnesota Architecture-History Inventory Form was completed for the Bunge Midway grain elevator.

2.6 EVALUATION

Upon completion of the fieldwork and research, the eligibility of the grain elevator for the NRHP was assessed based on the property's context, integrity, and significance. The NRHP criteria, summarized below, were used to assess the property's significance:

- Criterion A – association with events that have made a significant contribution to the broad patterns of our history;
- Criterion B – association with the lives of persons significant in our past;
- Criterion C – representation of distinctive characteristics of a type, period, or method of construction, the work of a master, high artistic values; or significant and distinguished entities whose components may lack individual distinction; and
- Criterion D – potential to yield information important in prehistory or history (NPS 1995).

The National Park Service (NPS) has identified seven aspects of integrity to be considered when evaluating the ability of a property to convey its significance: location, design, setting, materials, workmanship, feeling, and association. The integrity of the

property was assessed in regard to these seven aspects. The property was also assessed to determine if it represents a type of property to be excluded from the NRHP because of Criteria Considerations (NPS 1995).

Guidelines for evaluating the significance and historical integrity of grain elevators were developed as part of the National Register Multiple Property Documentation Form *Grain Elevator Design in Minnesota* (Frame 1989a) and are quoted below.

> Terminal elevators in Minnesota may be eligible for the National Register under Criterion A for their association with events that have made a significant contribution to the broad patterns of American history, Minnesota history, or local history, especially in relation to railroad, lake, or river transportation; the grain trade; grain processing; and the cooperative movement. In each of these cases, the significance probably will involve a firm, agency, or organization that owned and/or operated the elevator.
>
> A terminal elevator may be eligible under Criterion B for it association with a significant person, if it was a center of significant activity for that person and that person was not the designer or builder of the terminal elevator. If the person was noted as an entrepreneur, however, other properties may exist that better represent the person's achievements, such as an office or residence.
>
> Most terminals will be eligible under Criterion C. They probably will be eligible because they embody distinctive characteristics of terminal elevator design and engineering or represent significant phases in the evolution of terminal elevator engineering and construction. They also may be eligible for their association with significant elevator engineers, buildings, contractors, or fabricators, who made significant contributions to the design and construction of terminal elevators.
>
> Functional Arrangement. Terminal elevators were built in one of two arrangement schemes: (1) combined working house and storage-bin unit, and (2) separate working house and storage annex. In terminal elevator construction, type two became more common after 1900 and type one became less common. Any type-one terminal elevator should be considered potentially significant, and investigated for additional elements of significance below.
>
> Terminal elevators being considered under Criterion C are best examined in terms of their construction materials, as follows:
>
> Reinforced Concrete. Reinforced-concrete terminal elevator construction began in 1899 and by World War I had killed wooden terminal

construction completely and dominated all other materials with the minor exception of steel, which continued in lesser forms. In order to better determine the eligibility of concrete terminal elevators, in lieu of a field survey of extant concrete terminal elevators, examine the historic context, property types, and registration requirements for "Reinforced-Concrete Highway Bridges in Minnesota, 1900-1945." Both concrete bridges and grain elevators had parallel experimental periods and elevators built prior to 1912, like bridges, represent the earliest pre-standardized examples. All concrete terminal elevators built prior to 1912 should be considered eligible. Between that time and the end of World War I, concrete continued to compete with other materials, but was becoming dominant. All complete (i.e., not a concrete additional to an earlier elevator) concrete elevators built as new complexes prior to 1920 should be considered eligible, because they likely will represent a total engineering approach to the problem of building in concrete. Concrete terminal elevators built between 1920 and 1945 should be examined for individual areas [of] significance in terms of concrete construction. The development of concrete construction techniques, such as those involving slip forms, continued to evolve, and any concrete terminal elevator should be examined for evidence of new slip-form technology.

Special Consideration for Terminal Elevators. Each terminal elevator is a large, often extremely massive and expensive, undertaking. Each terminal elevator is a uniquely engineered solution to a particular grain-storage problem. There is no "standard plan" for a terminal elevator complex, although there may be standard or patent designs for particular elements, such as bins. Since terminal elevators of wood, steel, brick, and tile are relatively rare, this uniqueness presents little difficulty; almost all will be eligible. For the ubiquitous concrete terminal elevator, however, each case must be examined, especially for the period after 1920, when competition from other materials disappeared.

Terminal Elevator Integrity. As with other properties, the elevator must retain integrity of the element considered significant. For terminal elevators, this will mean integrity of the storage bins in most cases. Since most storage bins were constructed as units or blocks, the integrity of the original block largely will determine eligibility, especially in the case of a reinforced-concrete terminal elevator. For examples of wood, brick, and tile construction, the integrity of a single bin or tank will be enough integrity for eligibility, if the bin represents a rare survivor of a construction method and/or patent. This is especially true in the case of free-standing tanks of tile or brick construction. A single steel tank should not be considered to have integrity unless it is known to represent a patented type of grain elevator construction.

> In the working house or headhouse, exterior structural integrity is necessary, although some historic changes in fenestration are acceptable. Since interior elevator equipment, such as cleaners, conveyors, motors, engines, legs, scales, and distributors often were replaced without altering the elevator structure, it is not necessary for an elevator to retain this replaceable equipment in order to retain integrity. Conversely, the presence of significant and large installations of equipment, such as a significant large scale (which may be so large as to be almost part of the structure) will enhance the significance of the elevator.
>
> The absence of associated structures, such as offices and powerhouses, will not cause the loss of integrity, where the significance is embodied in the materials and design of the main storage unit. However, the presence of such structures may be used to make a case for enhanced significance if such structures are notable, such as an intact powerhouse for a steam engine (Frame 1989a:F5-F8).

In addition, the grain elevator was evaluated within the SHPO context, *Railroads and Agricultural Development (1870-1940)* and the Minneapolis HPC context, *Business and Industry, 1821-1990.*

3.0 HISTORICAL CONTEXT

3.1 MINNEAPOLIS GRAIN MARKET

Beginning in the 1860s, Minneapolis developed a thriving grain storage and processing industry, based primarily on the production of flour. Large flour mills were constructed along the banks of the Mississippi River taking advantage of the power provided by the St. Anthony Falls. The first significant boom in the flour milling industry was between 1870 and 1880, when large mills were built, resulting in a total of 23 mills in 1880. Later innovations in the flour milling process resulted in an even greater expansion of the industry and the advent of major millers with an international reach (Zahn 1990:4.3.9).

As a result of this concentration of flour milling, Minneapolis became a destination for rail lines shipping agricultural goods from points west. As such, Minneapolis emerged as one of the world's most significant grain markets, providing an important location for terminal grain marketing. Typically, terminal markets are found at strategic points at the juncture of producing areas and consuming areas (Minneapolis Grain Exchange 1968:14). Grain, most commonly spring wheat and barley, would be transported via railroad from the grain producing areas of western Minnesota, North and South Dakota, and Montana to Minneapolis. Concentrated in one location, the grain would be stored, processed and shipped to the cities in the Midwest and the East by railroad (Evenson 1964:9-10).

As a major railroad center near a grain-producing region, Minneapolis became an important terminal market for futures trading by providing "a cash market for grain consignments made by country elevators, [where] the grain was sold by commission merchants for a fee. The buyers were largely processors, exporters and terminal elevators with storage space" (Wills 1972:29). Buyers also participated in hedging, which is described as:

> "a form of price insurance that reduces the risk of losses through the inevitable ebb and flow of prices. Cash purchase or sales of grain or grain products are off-set with simultaneous sales or purchases of like amounts of grain for future delivery. By this action the price at which the grain will finally be delivered or received is determined by contract" (Minneapolis Chamber of Commerce 1946:28).

The commodity futures market makes the trading commodities more efficient for a geographically diverse and large-scale market. Price volatility is reduced by hedging, where grain handlers protect themselves against extreme losses due to price fluctuations. The result is overall cost savings in the marketing of grain, providing higher prices for producers and lower costs for consumers.

In order to facilitate the futures contract trade, the Minneapolis Chamber of Commerce (the Chamber) (later the Minneapolis Grain Exchange) was founded in 1881. The Chamber provided a meeting place for buyers and sellers in both the cash market and the futures market. Growth in the Chamber increased rapidly, thrusting Minneapolis quickly into one of the nation's leading grain markets. By 1885, Minneapolis led the nation in receipts of wheat at primary points with 32 million bushels. In the mid 1930s, Minneapolis had the largest wheat, barely, rye, and flax market in the United States, and was second only to Chicago in futures contracts (Philips 1936:18, 21). In the mid 1940s, Minneapolis had captured the largest cash grain market in the world (Minneapolis Chamber of Commerce 1946:26).

Because futures contracts required the storage of grain so the contract could be completed at a future date, the availability of large storage facilities, such as grain elevators, was necessary (Schonberg 1956:11). The warehousing of grain allowed local and distant consumers to call for their grain, according to their requirements. In short order, Minneapolis grain dealers heeded the call and large-capacity grain elevators were constructed. At the same time that Minneapolis' title of "Flour City" was being lost to the growing operations in Chicago, Kansas City and Buffalo, the grain marketing and storage industry was blossoming.

By the mid 1930s, Minneapolis had a total capacity of more than 93 million bushels in 62 elevators, more capacity than any other city in the North America, and possibly the world (Minneapolis Chamber of Commerce 1936). The figure finally out did the grain facilities of Fort William and Port Arthur, Ontario, which had led the market for more than a decade by its huge elevators on the north shore of Lake Superior. Minneapolis held onto this lead for at least three decades, all the while increasing its capacity to nearly 129 million bushels. Competition from Fort William and Port Arthur continued to be strongest, while new markets in the lower Midwest from Kansas City, Missouri; Wichita and Hutchinson, Kansas; Omaha, Nebraska; and Fort Worth, Texas took large shares of the market and bit at the heals of Minneapolis' lead. By the turn of the twentieth century, the Minneapolis Grain Exchange maintained the largest cash exchange market in the world, trading a daily average of one million bushels of grain including wheat, barley, oats, durum, rye, sunflower seeds, flax, corn, soybeans, millet, and milo (Minneapolis Grain Exchange 2001).

3.2 MINNEAPOLIS GRAIN ELEVATORS

In 1997, the MCDA completed an inventory of all grain elevators in Minneapolis. Thirty-six grain elevator sites were documented. Nearly every site was constructed during several building campaigns, often of different materials over successive periods. A table of grain elevators, including the site name, year built, builder, type, and owner was produced, separately listing each of the grain elevators, some of which were on common sites. Thus, on the 36 sites, a total of 97 extant grain elevators were identified. Further research was not conducted during this investigation to determine which of the grain elevators identified in 1997 are still extant, although at least one has been

demolished (the Stewart-Cepro elevator [HE-MPC-0625]) and others are slated for demolition.

According to the MCDA study, the Bunge Midway grain elevator is one among 42 grain elevators built entirely from reinforced concrete in Minneapolis, all of which were built between 1906 and 1955 (MCDA 1997). Additional elevators were constructed from a combination of materials, such as "tile, steel and reinforced concrete." One additional elevator is classified as "cement," four as "concrete," two as "fireproof (concrete)," and nine as "unknown (cement or concrete or reinforced concrete)." The construction dates of extant Minneapolis grain elevators range from 1901 to 1991 (two have unknown dates of construction). Thirteen grain elevators were constructed during the 1930s, the decade that the Bunge Midway grain elevator was constructed.

Minneapolis grain elevators are distributed throughout the city, but are always associated with a connection of an existing or former railroad. Nine elevators are located in north and northeast Minneapolis, 13 in southeast, and 13 in south Minneapolis (one of the 36 sites is not specified by area).

The only grain elevators in Minneapolis that are listed on the NRHP are those within the boundaries of the St. Anthony Historic District. These grain elevators are associated directly with the flour milling industry, and would therefore be *receiving* elevators for the flour mills, rather than *terminal* elevators. In a receiving elevator, all grain is intended for the private use of the milling company only. A terminal elevator, on the other hand, would receive the grain, weigh, clean and store it before shipping it out to the final processor. This distinction results in design and engineering differences. While a receiving elevator would have significant capacity for receiving incoming grain, it would have only limited facilities for removal of the grain, perhaps only a conveyor to move the grain to the mill. A terminal elevator would house major incoming and outgoing functions, as well as complex weighing equipment that was necessary for public elevators, which are subject to government regulations. Grain cleaning equipment would be present in the terminal elevator, whereas that function would be undertaken in the mill in a receiving elevator operation (Frame 1989b:8).

The Stewart-Cepro grain elevator was determined eligible for listing on the NRHP in 2002 as the best remaining example of a Minneapolis public terminal elevator located on an isolated, individual site, which helps to illustrate the significance of the grain trade in Minneapolis during the first half of the twentieth century. The structure is no longer extant.

3.3 Grain Elevator Construction

As home to one of the busiest milling industries in the country, Minneapolis rapidly became a center for pioneering methods of grain storage, especially the reinforced-concrete elevator (Frame 1989a:E-29). The construction of terminal elevators in Minneapolis began in 1867 by the Union Elevator Company. These early elevators were

constructed entirely of wood, often resembling a very tall barn. This type of elevator, having no means of distributing the grain horizontally across several bins, required the replication of expensive equipment, such as scales and cleaners, should the size of the operation significantly increase. Furthermore, the fire hazard of wooden elevators was extreme and required large fire insurance premiums. As the Minneapolis grain storage and milling industry boomed, the need for safer and more economically efficient elevators increased (LaPray 1980:84).

F. H. Peavey introduced a horizontal conveyor belt system in the 1880s. This system allowed the grain to be lifted up a grain leg, weighed, cleaned and sorted within the headhouse, and then horizontally distributed to any number of bins via the horizontal conveyor belt system. This greatly increased the efficiency of grain storage system and allowed for massive terminal elevator complexes to be built in Minneapolis (LaPray 1980:84).

The next major development in grain elevator construction was in the use of materials. The period between 1899 and 1910 was one of great experimentation with building materials that would be both more economical and less prone to fire than wood. The major alternatives included steel, brick, tile, and concrete. Although significant brick and tile grain elevators were constructed in Minneapolis, such as the brick Consolidated "A" Mill, and the tile Pillsbury "A" Mill, concrete and steel were the primary descendents of this new age of grain elevator technology. By 1910, nearly all grain elevators were made of concrete (LaPray 1980:88).

In 1899, the world's first concrete elevator, known as "Peavey's Folly," was constructed in St. Louis Park, Minnesota. This singular cylinder was 20 feet (ft.) in diameter and 124 ft. high. It served as an experimental prototype for an annex to the large Peavey facility in Duluth, which was constructed the following year. Although widely expected not to be able to withstand the pressure of the grain as the structure was either filled or emptied, it was found to survive the ordeal very well. In fact, the grain, emptied over a winter's storage, was issued in excellent condition (Folwell and Durham 1937:543; LaPray 1980:88).

Various patented methods were used to construct the immense concrete structures, each one further perfecting the process through increased engineering knowledge of the qualities of concrete and increased efficiency and economics of its construction. The earliest of the concrete construction employed a slip-form method, where a form for the concrete would be shifted up the wall for the next pour of concrete while the form rested on the hardened concrete of the most recent pour. The type of slip-form construction, where vertical bins could be constructed with a continuous pour by slipping the forms while the concrete is still plastic was first implemented in 1903 for the Storage Annex for the King Elevator of the Canadian Pacific Railroad at Port Arthur, Ontario. Fegles Construction Company was among the engineers and contractors who contributed to the early development of slip-form technology between 1900 and 1920 (Frame 1989a:E-30).

For terminal elevators, the reinforced-concrete grain elevator had become the normative by 1910, mostly because it was the most economical method for storing grain. In his work on early concrete construction, *A Concrete Atlantis: U.S. Industrial Building and European Modern Architecture, 1900-1925*, Reyner Banham states:

> The concrete cylinder elevator is still so omnipresent because it represented an almost excessively good investment when first built. If it was solidly enough made to carry its load, maintain an equable thermal environment, and resist fire for long enough to amortize the original investment, then it had to be well enough made to last more or less forever -- and be well enough made to be extremely costly to demolish (Banham 1986).

Concrete would continue to be the preferred method of construction for grain elevators at least through the early 1950s. In Minneapolis, 57 of the 70 grain elevators built between 1910 and 1960 were constructed all or partially of concrete or reinforced concrete. Between 1920 and 1930, all but two of the 27 elevators erected were made entirely from concrete. Beginning in the late 1950s, although fewer elevators were constructed, steel bins became the predominant storage container (MCDA 1997).

3.4 Bunge Elevator Company

The Bunge Elevator Company, which constructed the Midway grain elevator, was a division of Bunge Limited, an international commodity trading firm with European origins. Bunge & Co. was established in 1818 by Johann Peter Gottlieb Bunge in Amsterdam, the Netherlands as an import/export trading company. By the mid-nineteenth century, the firm had become one of the leading commodity trading firms in the world. Global expansion began first in Argentina in 1884 when Ernst Bunge developed an associated company called Bunge y Born in Argentina to export that country's grains and wheat. By 1905, Bunge expanded its core businesses of wheat exportation with investments in Brazil. The business grew into soybean crushing, fats and oils production, and the manufacturing of paints, textiles and cement, and eventually became active in the United States, the United Kingdom, Australia, Asia, Venezuela and Spain. Its first foray into the United States began in 1918 to trade in raw agricultural commodities and in 1923, Bunge North American Grain Corporation (now known as Bunge North America) was incorporated in New York as a privately held company. The company's first sizable grain facility was acquired in 1935, when Bunge purchased the Midway Elevator, now known as the Bunge Midway grain elevator (Bunge North America 2006).

During the 1940s, Bunge continued to expand its North American operation and concentrated on domestic grain processing. Hallet & Cary, Inc. and Gano Grain Company were acquired by Bunge in 1946, significantly expanding its grain storage capacity in the upper Midwest and Kansas. Continued acquisitions during the 1950s resulted in one of the largest grain handling and exporting companies in the United

States. Harkening to origins in commodity import/exports, Bunge concentrated its North American grain facilities along the Mississippi River and its tributaries during the 1960s, 70s and 80s to fulfill its commitment to grain exportation. In 1961, the Company built what was at the time the largest grain export facility in the United States in Destrehan, Louisiana. The company also diversified by building or acquiring grain origination facilities, soybean processing plants, corn milling plants, edible oil refineries and bakery product manufacturing facilities. The 1990 move of its headquarters from New York City to St. Louis, Missouri further reinforced its commitment to export trade along the Mississippi River (Bunge North America 2006).

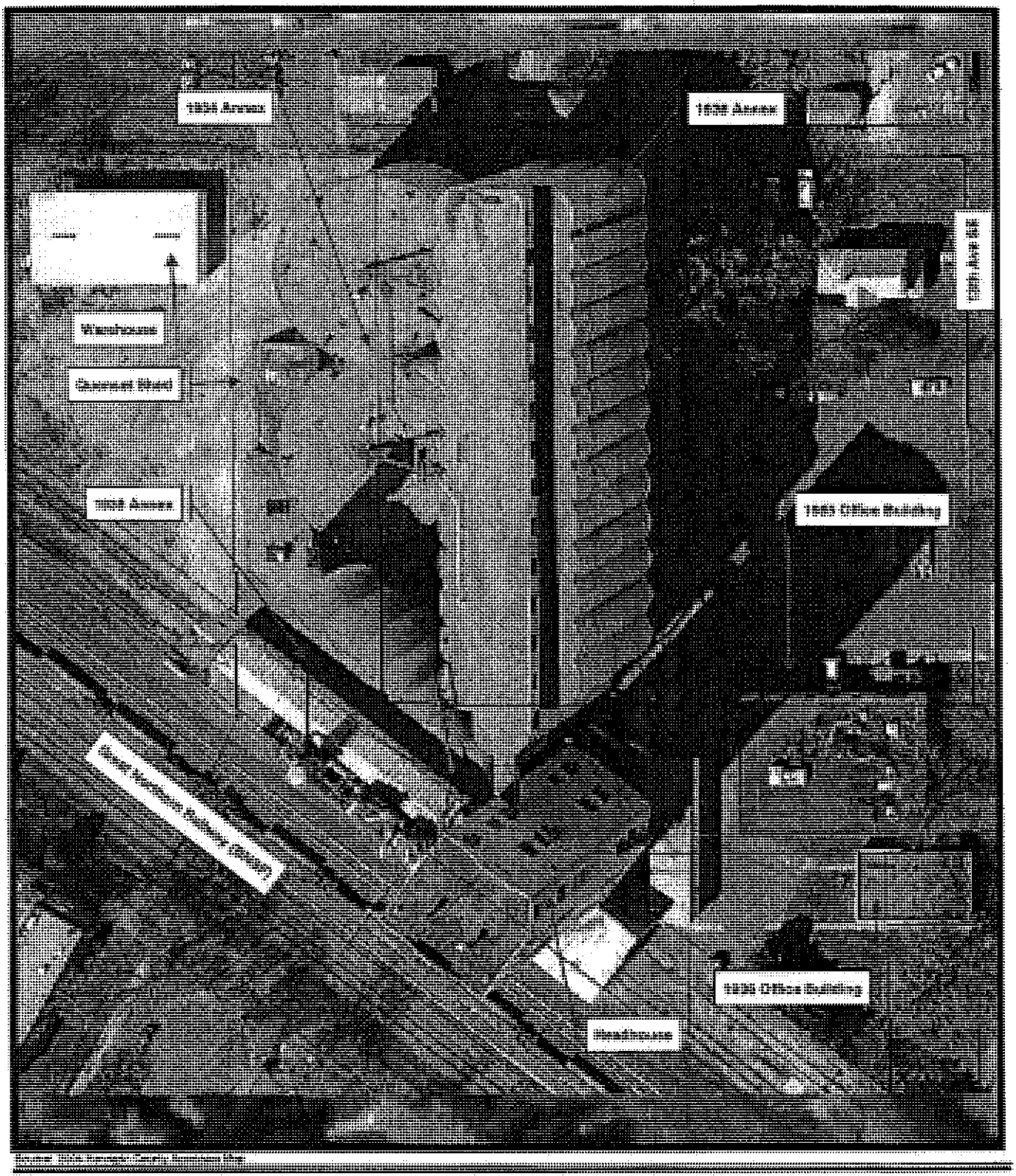
4.0 RESULTS

4.1 DESCRIPTION

The Bunge Midway grain elevator complex is comprised of a headhouse and track shed (1936), a block of storage bins extending west from the headhouse (1935), and a block of bins extending north from the headhouse (1936). Two larger bins stand within the V-shape of the 1935 and 1936 blocks; these were constructed in 1954. Other buildings associated with the complex include a one-story, concrete block office building (1936), a two-story concrete block office building (ca. 1965), a metal Quonset storage building (1947) and a metal warehouse (1973). The complex is situated on the northern side of the Great Northern Railway (now BNSF), and immediately west of Van Cleve Park within a mostly residential neighborhood of southeast Minneapolis (Figure 2).

The headhouse towers above the rest of the complex at 227 feet. The reinforced-concrete structure is rectangular in plan with a clipped eastern corner and features a stepped parapet with a slightly Art Deco motif (Figure 3). The word "BUNGE" is highly visible with large metal lettering near the top of the headhouse's east and south facades. The large, industrial sash windows placed into the headhouse provide lighting and ventilation for various tasks that occur on each of the floors. The headhouse contains a passenger elevator, an employee lift belt, and a metal stairway for vertical human access. At the base of the headhouse is the track shed, covering two spur tracks from the Great Northern for receiving and shipping grain. The framed shed structure is sheathed with corrugated metal siding, with openings for rail cars on its east and west ends, and fenestration on the south side (Figure 4). Grain spouts and dust control equipment are located on the roof. Metal grates are located on the floor, where grain would be dumped into the receiving pits below (Figure 5). A massive car puller found in the basement would be used to move the railcars into and out of the shed area (Figure 6).

The headhouse (sometimes known as a "workhouse") contains most of the working space for a typical grain elevator. Through a process of elevation and gravity, grain would be transported from the receiving pits under the adjacent railway tracks in the basement of the headhouse, and would be transferred up to the top of the headhouse via one of two legs in a bucket conveyor system. Grain would then be sifted through a process of weighing, cleaning and sorting into the 22 bins located within the headhouse structure. After the cleaning and sorting would be completed, the grain would be elevated again for storage in one of the two storage annexes. Grain would move along a conveyor system located in the gallery of the storage blocks; a jack would be placed at the location of the desired bin and the grain would be deposited at that location. To remove the grain, a hopper at the bottom of the tanks would be opened, grain would convey along a belt located in the basement, it would again be elevated, and then sent through an external spout into an awaiting rail car (or in later years, a motor truck). The steel bins, spouts, vertical and horizontal conveyors associated with the activity of the headhouse are still located within the building (Figures 7 and 8).



Bunge Midway Grain Elevator
Phase II Architectural History Evaluation
Hennepin County, Minnesota

Site Map

Figure 2

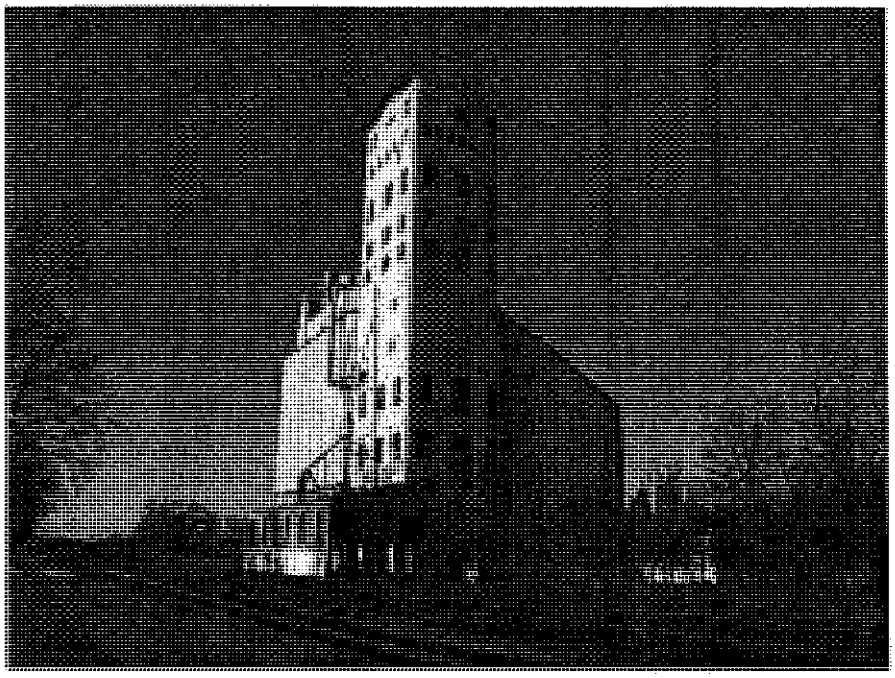


FIGURE 3. HEADHOUSE, FACING NORTHWEST

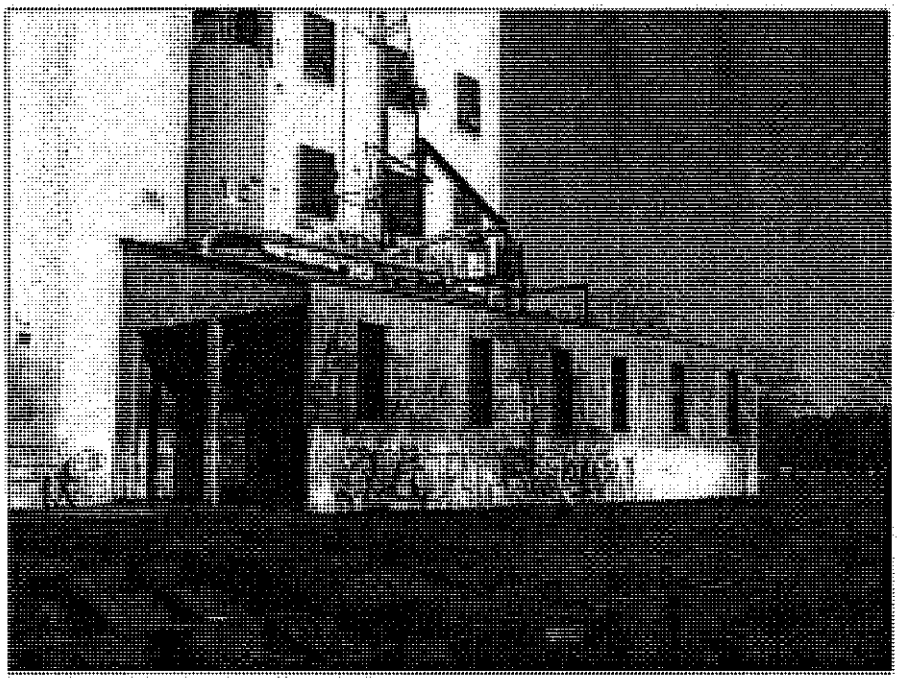


FIGURE 4. TRACK SHED, FACING NORTHEAST

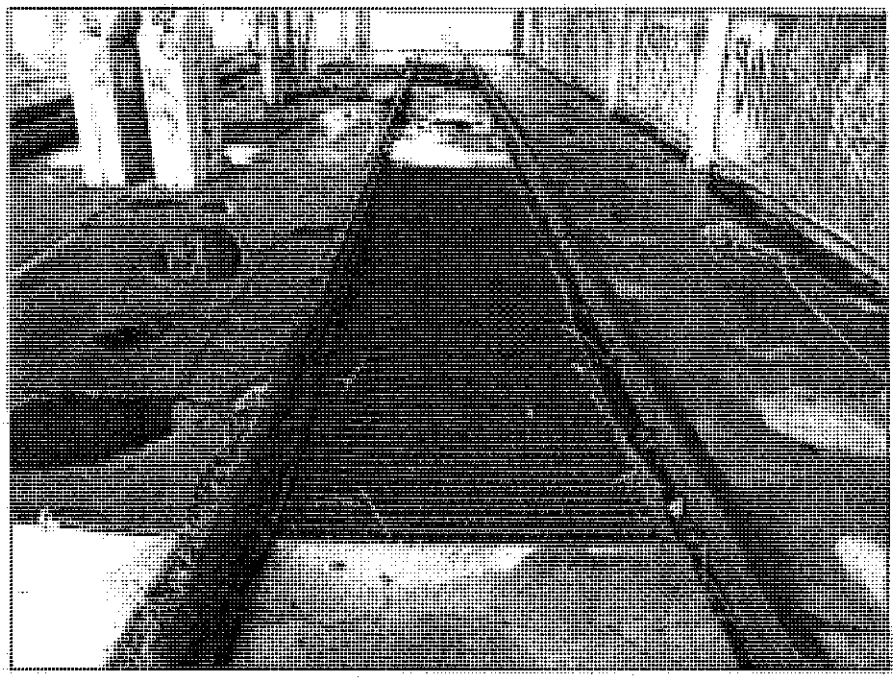
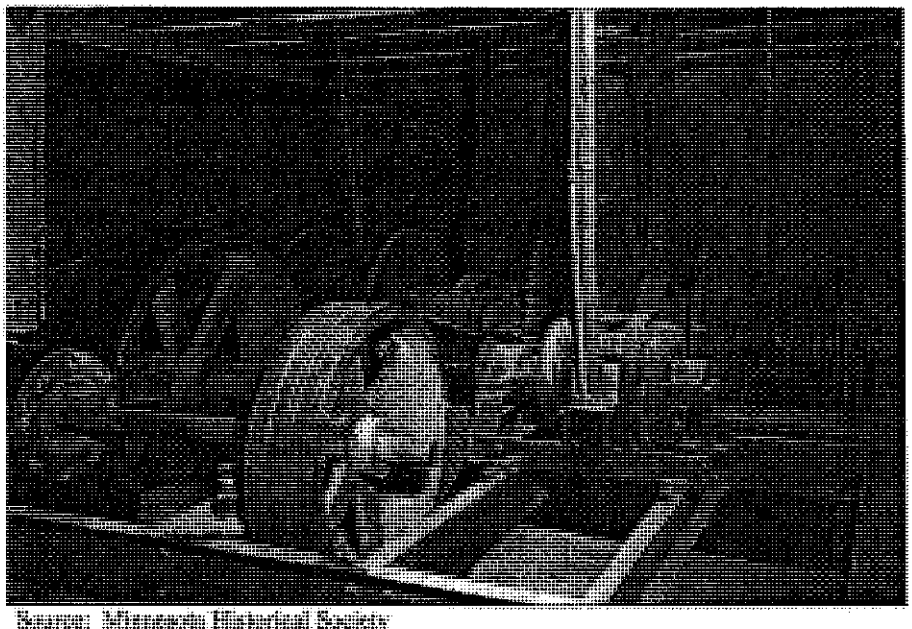


FIGURE 5. RECEIVING PIT GRATES IN TRACK HOUSE



Source: Minnesota Historical Society

FIGURE 6. CAR PULLER LOCATED IN BASEMENT (1937 PHOTOGRAPH)

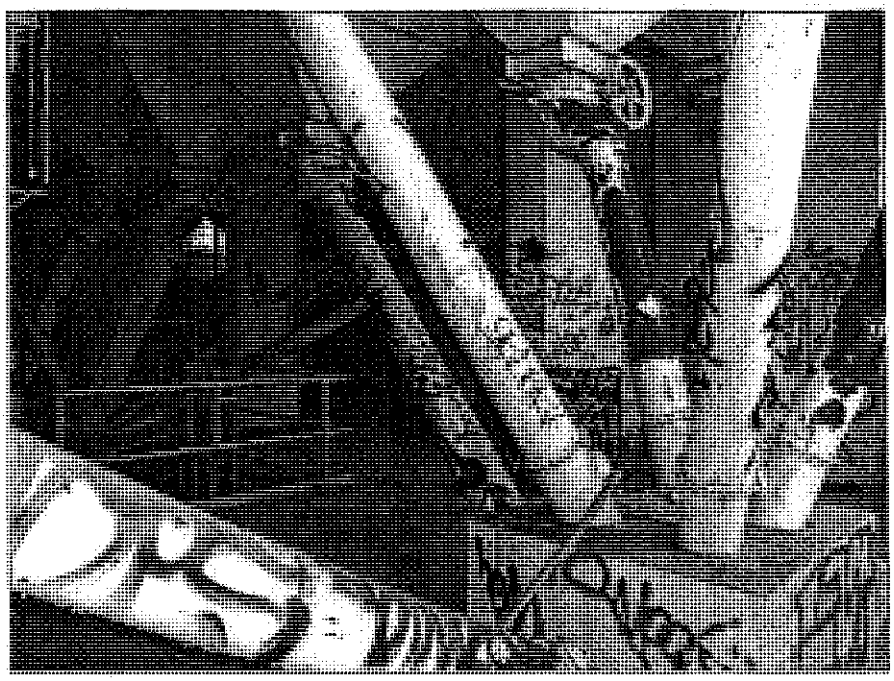


FIGURE 7. SPOUTING FLOOR IN HEADHOUSE

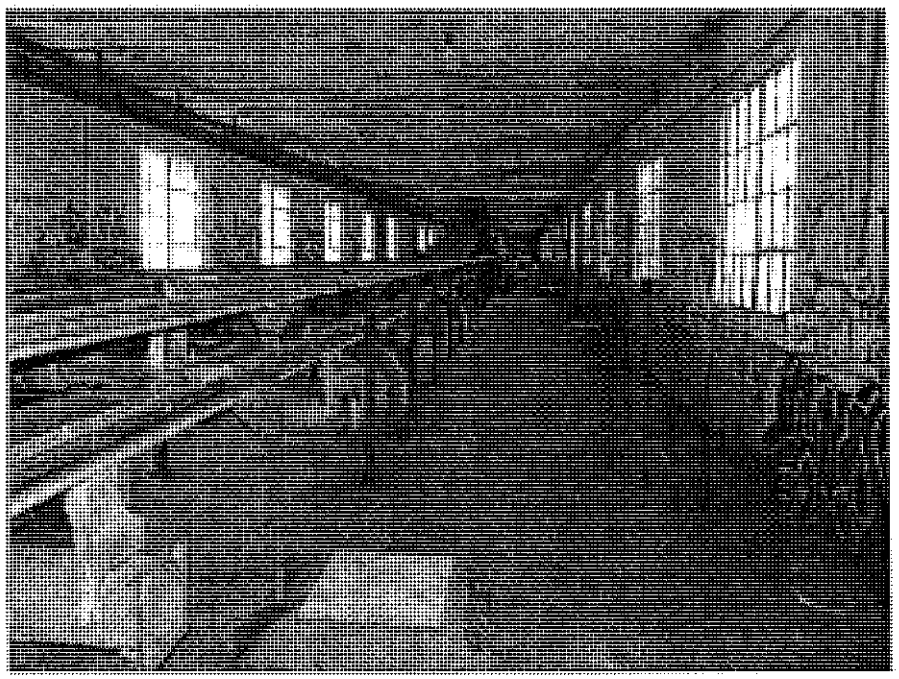


FIGURE 8. NORTH CONVEYOR GALLERY

The 1935 reinforced-concrete storage block is comprised of eight cylindrical bins, with 12 interstice and outerstice bins (Figure 9). The structure stands 120 feet in height. A poured concrete, one-story concrete gallery spans the length of the block and contains the conveyor belt. Most of the small, square windows have been blocked with wood panels. The gallery terminates in a rectangular tower at its west end. A one-story, concrete warehouse was added to the west end of this block in 1944. The 1936 storage block is similarly constructed of reinforced concrete, but had a greater capacity and rises to 125 feet (Figure 10). This annex is comprised of 15 cylindrical bins, with 24 interstice and outerstice bins. The gallery also contains the horizontal conveyor system. The poured concrete walls of the gallery are pierced with large metal industrial sash windows. Each of these annexes is connected to the headhouse via a catwalk.

Another storage annex was constructed in 1954, immediately west of the 1936 block (see Figure 9). This annex is comprised of two 80-foot diameter tanks, 74 feet in height (Building Permit 343337, on file at the Minneapolis Building Inspection Department). These tanks further increased the capacity of the operation and were connected to the headhouse via overhead spouts and basement conveyors.

East of the headhouse is a small, one-story 1936 office building constructed of concrete block (Figure 11). This office, built concurrently with the headhouse, housed the offices for the elevator. The utilitarian building is rectangular in plan and has a flat roof with a parapet wall. Regular fenestration provides light to the interior spaces, and two entrances are located on its south façade. A second office building is located immediately north of the 1936 office building. The second structure, constructed circa 1965, is a two story office building used to house Bunge's central district offices (Figure 12). It was constructed on the vacated Brook Avenue SE. Also constructed of concrete block with simple flat roof and rectangular plan, the primary façade features a simple portico and stylized spandrels above and below the fixed sash windows.

Immediately west of the 1954 annex stands a metal Quonset structure, erected in 1947. A warehouse, with vertical sheet metal siding is located near the northeast corner of the parcel. It was constructed in 1973 when the 1894-grain elevator was demolished (Figures 13 and 14).

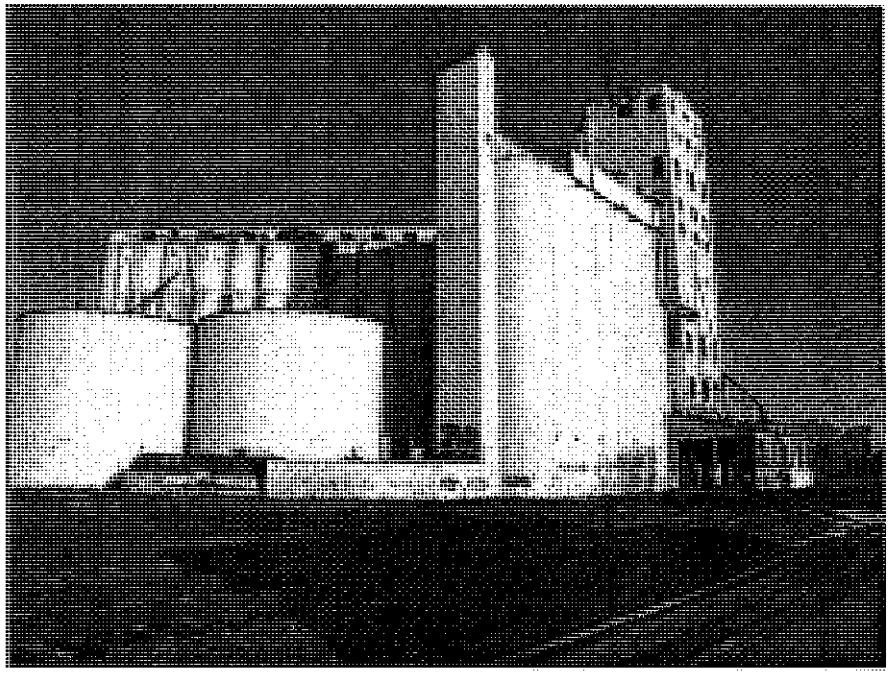


FIGURE 9. 1935 WEST STORAGE ANNEX AND 1954 ANNEX, FACING NORTHEAST

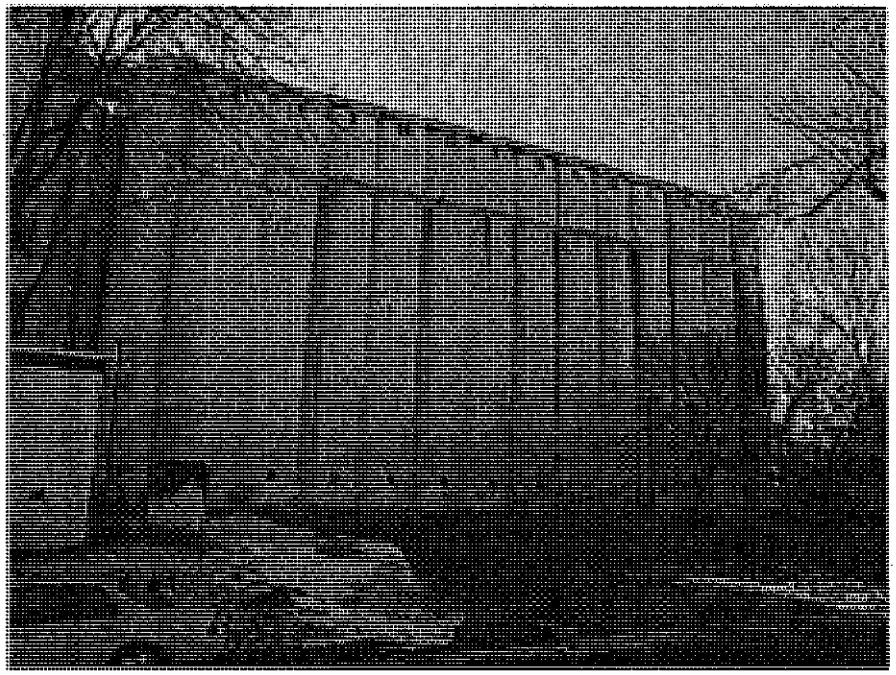


FIGURE 10. 1936 NORTH STORAGE ANNEX, FACING NORTHWEST

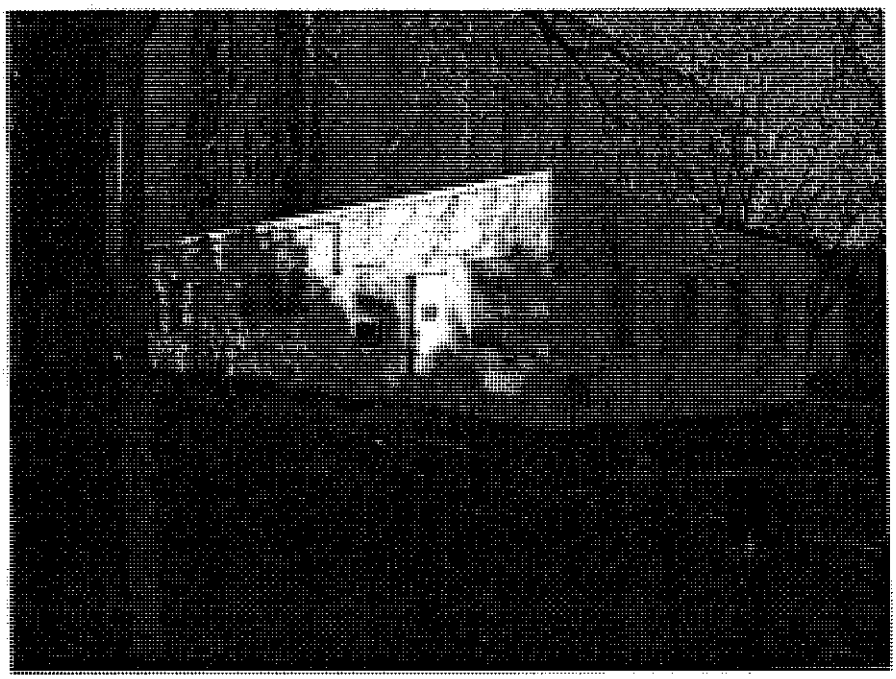


FIGURE 11. 1936 OFFICE BUILDING, FACING NORTHWEST

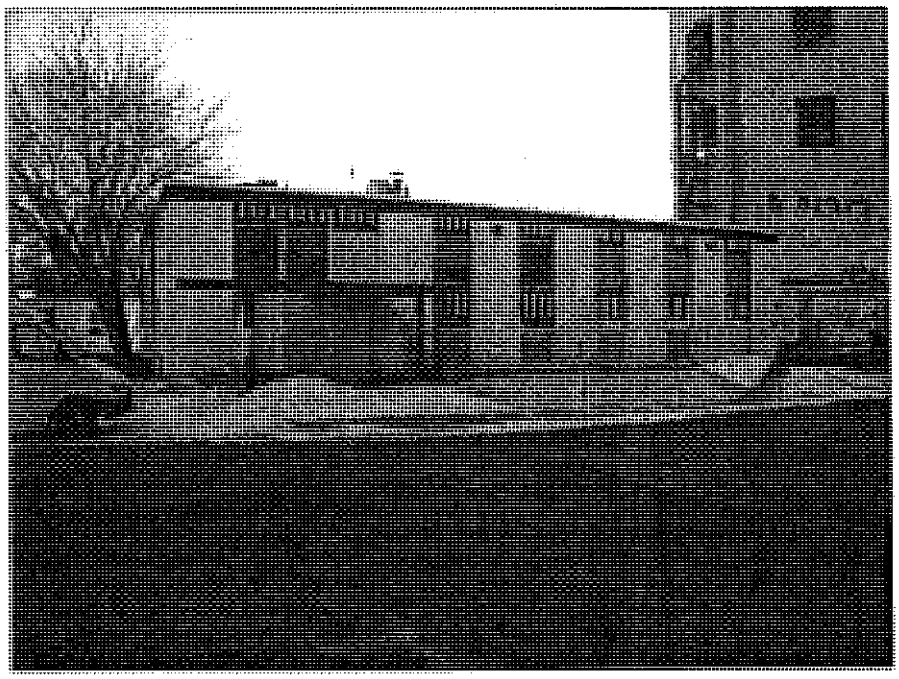


FIGURE 12. CIRCA 1965 OFFICE BUILDING, FACING SOUTHWEST

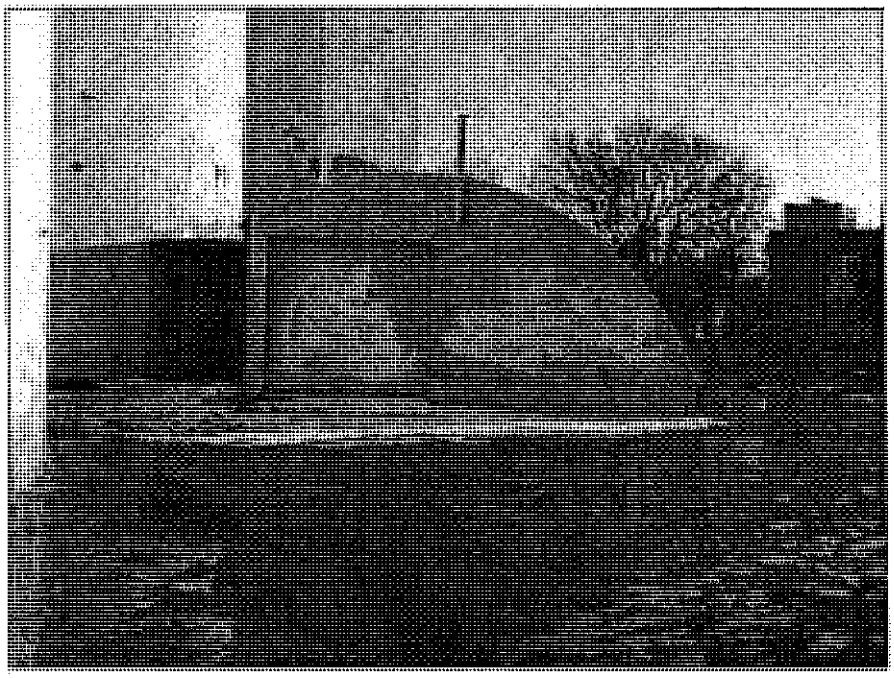


FIGURE 13. QUONSET SHED, FACING SOUTH

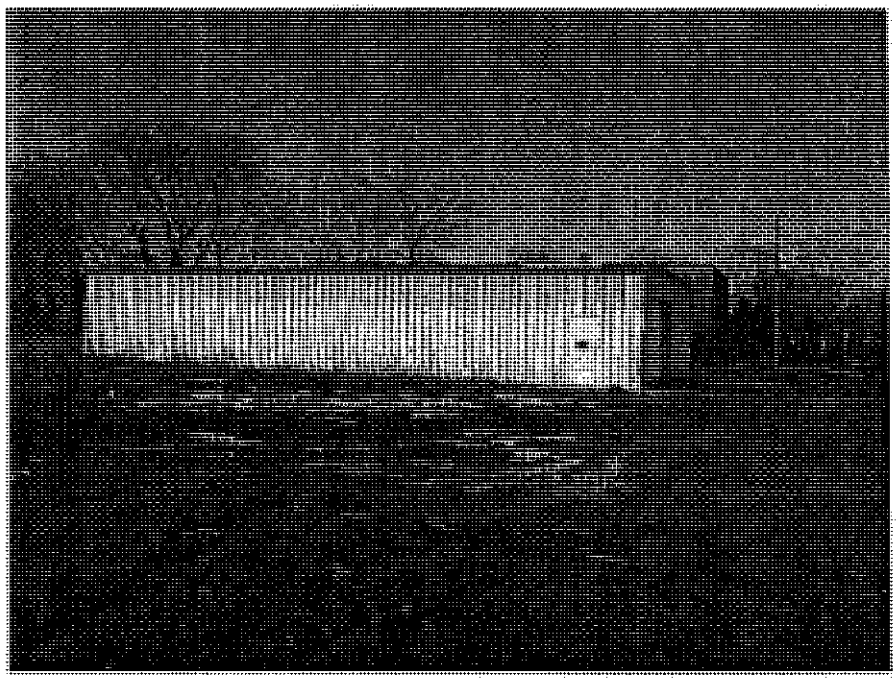


FIGURE 14. METAL WAREHOUSE, FACING NORTHWEST

4.2 HISTORY

The site of the Bunge Midway grain elevator has long been the location of grain storage activity, taking advantage of its adjacency to the Great Northern Railway. The earliest elevator on the site, known as Midway Elevator No. 1, was erected in 1890 by L. C. Bislece & Sons for D. D. Linton Co. The elevator capacity was expanded in 1892, and a brick engine and fuel room were added the same year (MCDA 1997). This elevator was located at the approximate location of the present headhouse. Another grain elevator, located northwest of the 1890 structure on the opposite side of 12th Avenue SE was constructed in 1894. The 600,000 bushel, iron-clad frame structure cost $25,000 and was known as Midway Elevator No. 2 (Figures 15 and 16). By 1910, the original 1890 elevator was demolished and operations continued at the Number 2 elevator, eventually under the management of the John Kellogg Company (Minneapolis Building Permit 33597, on file at the Minneapolis Building Inspections Department).

During the 1930s, the Midway Elevator complex underwent a period of significant expansion and modernization, utilizing the reinforced concrete building techniques and materials, which had by then become standard. In 1934-35, a block of storage tanks was constructed immediately east of the 1894 workhouse, parallel to the Great Northern Railway tracks. These concrete tanks were constructed under the ownership of the J. Kellogg Company at a cost of $35,000 and are an extant part of the present Bunge Midway elevator complex. The modern annex, with 500,000 bushel storage capacity, continued to be serviced by the workhouse of the adjacent 1894 elevator (Figure 17) (Minneapolis Building Permit B238606, on file at the Minneapolis Building Inspections Department). By 1934, the Midway Elevator complex was among 30 "regular" public elevators in Minneapolis and had a capacity of 1,150,000 bushels, below the city's median capacity at the time.

The following year, the Bunge Elevator Corporation acquired the Midway, and immediately set about the further modernization and expansion of the old plant. The event marked Bunge's entrance into the North American grain trade, by its first acquisition of a significant grain handling facility in the continent (Bunge had already purchased the much smaller, 150,000 bushel Wheat Growers elevator). The purchase also indicated a shift towards increased foreign investment in the Minneapolis grain market; the Marquette Elevator was sold to the France-based Louis-Dreyfus Company the same year (Bunge North America 2006; *Northwestern Miller* 1936a). By March 1936, Bunge had a building permit to erect a 240-ft. by 60-ft. reinforced concrete storage tanks and workhouse at an estimated cost of $220,000 (Figure 18). Hustek Company served as project engineers, and the H. W. Leighton Company and R. J. Keehn Company were contractors (Minneapolis Building Permit B243376, on file at the Minneapolis Building Inspections Department). The new workhouse would stand adjacent to the recently completed concrete tanks on its southwest end with a modern rail shed on the tracks. The new storage block would follow the street grid, parallel to 13th Avenue SE, and nearly perpendicular to the Great Northern Railway tracks (Figure 19).

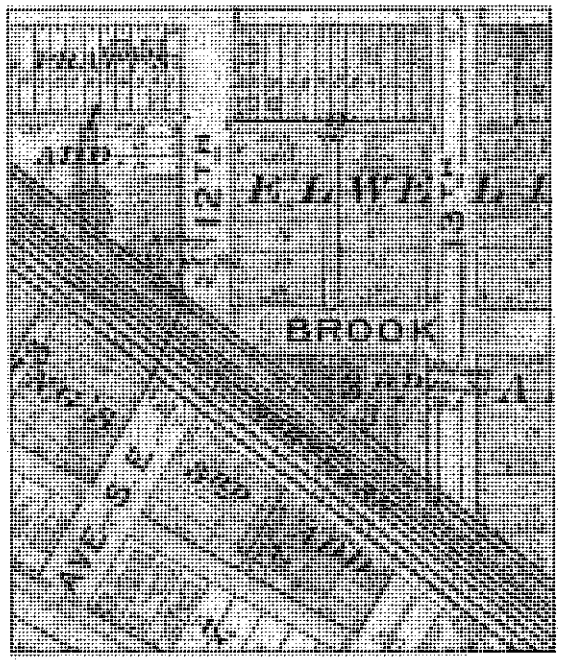
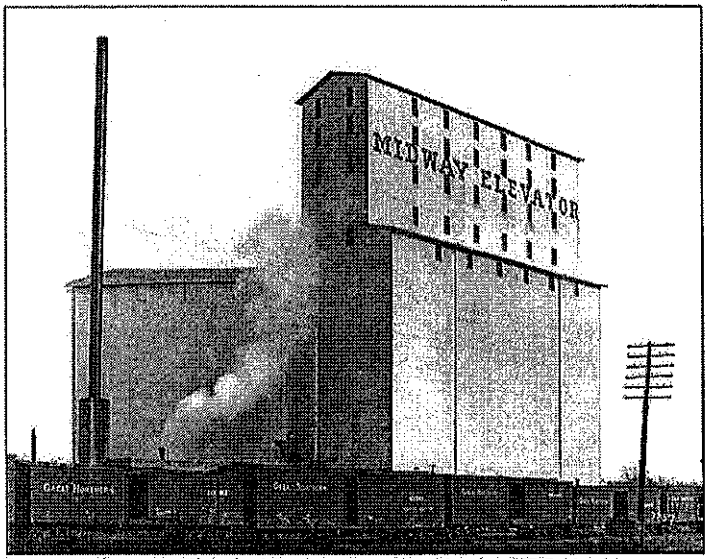
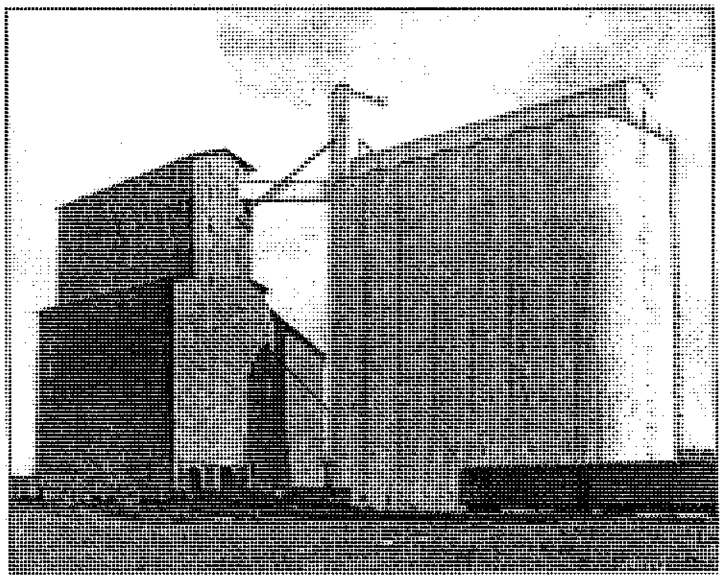


FIGURE 15. 1914 PLAT MAP



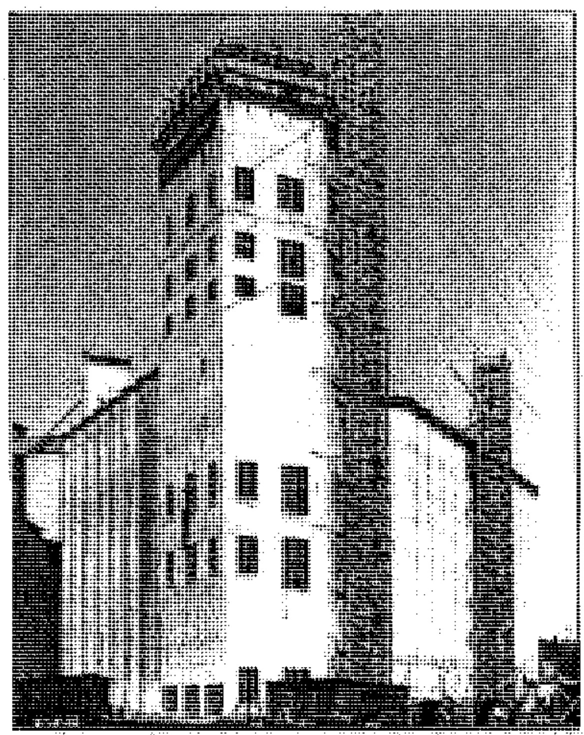
Source: Minnesota Historical Society, Location Number HD7.11 p44

FIGURE 16. MIDWAY ELEVATOR, CIRCA 1914



Source: Minnesota Historical Society, Location Number [illegible]

FIGURE 17. MIDWAY ELEVATOR, CIRCA 1935



Source: Minnesota Historical Society, Location No: [illegible]

FIGURE 18. BUNGE MIDWAY ELEVATOR UNDER CONSTRUCTION, 1936

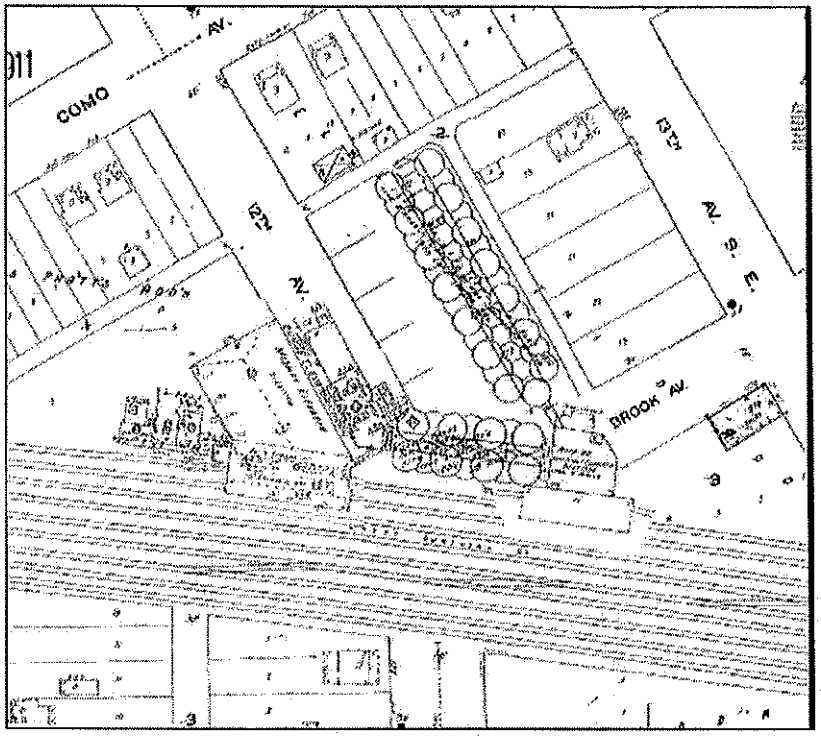


FIGURE 19. 1951 SANBORN FIRE INSURANCE MAP

The new elevator and workhouse incorporated the most modern equipment in grain storage systems. Constructed using the slip-form method, the 125-foot high storage annex was erected in less than nine days with a continuous pour of concrete operating day and night. A modern gravity operation system, in which the grain would be elevated only once rather than twice or more, through the grading, cleaning and drying process of the headhouse's eight floors made the system more efficient. Grain would be unloaded in the 100-foot long, double-track unloading shed, where it would be dumped into one of four 3,000-bushel receiving pits. The grain would be raised in one of two elevating legs via a 34-inch rubber belt, each having a capacity of 15,000 bushels per hour. Grain would traverse to the top of the 227-foot headhouse, where it began to work its way through the process. Grain would drop into 3,000-bushel garners and then into hopper scales, where it would be weighed in accordance with state standards. It would then be distributed to any of the upper cleaning bins, to the conveyor belts leading to the any of the storage galleries, or to a drier. Grain passing through the 22 upper cleaning bins would be spouted through to machines on two cleaning floors. The cleaned grain and screenings would be sent to the lower storage bins within the workhouse. Turn heads on each steel hopper could discharge to any of the elevating legs for re-elevation, from whence the grain could be sent to either of the storage annexes, or weighed and spouted to rail cars on either track and directly shipped out (*Northwestern Miller* 1936b:178-179).

A transformer house on the north side of the headhouse stored the electrical equipment and switch room that operated the modern equipment, which included an expeditious passenger elevator, an employees' belt elevator, and the various grain distributing legs and belts (*Northwestern Miller* 1936b:178-179).

The new storage annex had a capacity of 1,340,000 bushels and was comprised of 15, 24-foot diameter concrete circular bins with interstices. The bins were capped with a 24-foot wide conveyor gallery, which housed a 36-inch, 15,000 bushel gallery conveyor. Grain would then be conveyed and deposited into the selected storage tank. Below the bins, a conveyor tunnel and equipment served a similar purpose – to convey grain discharged from the bins into the headhouse for cleaning, shipping, or transfer to other bins, as needed. An advanced drying system was also included in the installation. Compressed air could be forced continuously through the grain storage tanks, making the "turning" of the grain an unnecessary task (*Northwestern Miller* 1936b:178-179).

With the expansion, the Midway's total capacity increased to 2,500,000 bushels, making it the fifth largest "regular" public elevator in Minneapolis, pushing the city's total capacity to 93,340,000 bushels, and thereby forming the largest grain storage center in North America (Minneapolis Chamber of Commerce 1936).

In 1944, Bunge built a concrete warehouse addition onto the 1935 storage block, and a metal Quonset shed was constructed next to that addition in 1947. In 1954, two 80-foot diameter storage tanks, 74 feet in height were built immediately west of the north tanks at a cost of $120,000 (Minneapolis Building Permits B276548, B318447, B342550 and 343337, on file at the Minneapolis Building Inspections Department). An office building for the Bunge Corporation central district offices was erected in the mid-1960s on the vacated Brook Avenue SE, just east of the north block.

The old, 1894 wood and iron elevator building was finally demolished in 1973. The Bunge Midway elevator complex continued to operate until approximately 2002, when the grain storage facility was closed and vacated, thus ending more than a century of grain handling activity on the site.

4.3 SIGNIFICANCE

The Minneapolis grain trade was an important aspect of Minneapolis history during the early and mid twentieth century. In a period when the flour milling industry, which created great wealth, industry and notoriety for the City during the previous century was rapidly dwindling due to competitive markets elsewhere in the county, the Minneapolis grain exchange – as exemplified by terminal elevators – thrived and expanded. As one contemporary author phrased it, "when one phase of its business was jeopardized, it rapidly developed a substitute.... Minneapolis still forges ahead as a grain center" (*Northwestern Miller* 1936b:178). Many of Minneapolis' remaining terminal grain elevators contributed to the twentieth century grain market by providing capacity for storage. For this reason, historical significance may be bestowed upon most or all of

those that retain historical integrity. Frame's historic documentation on Minnesota's grain elevators offers some guidance on designation criteria. The study, however, emphasizes the construction and engineering techniques used to build elevators, noting that most terminal elevators will be eligible under NRHP Criterion C (Frame 1989a:F-6). Under Criterion A, Frame writes that terminal elevators may be eligible "for their association with events that have made a significant contribution to the broad patterns of American history, Minnesota history, or local history, especially in relation to railroad, lake, or river transportation; the grain trade; grain processing; and the cooperative movement. In each of theses cases, the significance probably will involve a firm, agency, or organization that owned and/or operate the elevator" (Frame 1989a:F5). The Bunge Midway grain elevator is best evaluated within the context of the growth of the Minneapolis grain trade, which dominated the North American market beginning in the mid-1930s.

The Bunge Midway grain elevator complex was constructed in 1935, 1936 and 1954 by the Bunge Elevator Corporation for participation in the Minneapolis public grain market through the Minneapolis Grain Exchange. The construction of the major additions of 1935 and 1936 were the major contributors pushing the storage capacity of Minneapolis elevators in excess of those of Fort William and Port Arthur, Ontario, then the North American leader in grain storage. The old Midway elevator, which had a capacity of 600,000 bushels, was expanded first in 1935 to 1,150,000 and then in 1936 to 2,500,000 bushels, the latter of which pushed the city's total grain storage capacity to 93,635,050, almost 1 million bushels more than its nearest rival, making the City the greatest grain storage handling facility in North America, and possibly the world. Minneapolis would be able to hold this position for at least the next three decades (Minneapolis Chamber of Commerce 1934; 1935; 1936; 1938).

The capacity for grain storage was critically interlaced with the city's ability to serve as a grain exchange and financial center, representing an important aspect of the city's economy. While the Bunge Midway grain elevator is only one of dozens of Minneapolis grain elevators that contributed to the overall capacity, the elevator has the distinction of being *the one* that placed Minneapolis on the top of the list in terms of storage capacity, which meant a more accommodating, flexible and competitive market for grain futures and hedging. For this reason, the Bunge Midway grain elevator is recommended as significant under NRHP Criterion A in the area of commerce.

The period of significance for the Bunge Midway grain elevator begins in 1935, when the construction of the west storage block was completed, and ends in 1940, when the pre-World War II building phase largely comes to a close. While some capacity continued to be added between 1940 and 1950, the increase amounted to only 1.7 percent. The large increases in capacity following World War II (25 percent between 1950 and 1965) may largely be attributable to the post-war boom and consolidation of the Minneapolis grain market(Minneapolis Chamber of Commerce 1940; 1950; 1965). The boundaries of the property include the area historically devoted to grain processing, which includes Lots 13 to 23, inclusive, Block I in the Neil and Pratt's Addition to Minneapolis, and Lots 13 to

18, inclusive, Block 2, and Lots 2, 3 and 4, and the North 30 feet of Lot 1, Block 3 in Elwell's Third Addition to Minneapolis, inclusive, and the adjacent vacated street excluding railroad right-of-way (Figure 20). Generally, this includes the area north of the Great Northern Railway line, east of 11th Avenue SE, south of the alley parallel to Como Avenue SE between 11th and 13th Avenue SE, west of the vacated alley parallel to 13th Avenue SE, and the portion south of the vacated Brook Avenue SE and west of 13th Avenue SE. These boundaries would exclude the circa-1965 office building. The headhouse, the 1935 storage block, the 1936 storage block, and the 1936 office building. The 1947 Quonset shed, the 1954 storage bins, and the 1973 metal shed would be non-contributing elements.

Frame states that elevators "will rarely be eligible under Criterion B," unless the elevator "was a center of significant activity for that person and that person was not the designer or builder of the terminal elevator" (Frame 1989a:F-3; F-5). The Bunge Midway grain elevator is not known to be significantly associated with the life of a significant individual.

Grain elevators are most commonly evaluated under Criterion C, according to Frame (1989a:F-3). SHPO has established clear criteria by which terminal elevators may be considered eligible under Criterion C based on the functional arrangement of the structure, the materials, and the construction techniques employed, particularly with concrete elevators. Functionally, terminal elevators were built in one of two arrangement schemes: 1) combined working house and storage-bin unit; and 2) separate working house and storage annex. Because of their relative rarity, SHPO recommends that type-one arrangements should be considered potentially significant. The Bunge Midway grain elevator was constructed using the more common, type-two arrangement and would therefore not be considered significant under this consideration.

Reinforced concrete elevators completely dominated all other types of elevators by 1920. SHPO recommends that all concrete elevators built prior to 1912 represent the earliest pre-standardization style and should be considered eligible. Furthermore, all complete concrete elevator complexes (i.e., not a concrete addition to an earlier elevator) built prior to 1920 should be considered eligible. Concrete elevators built between 1920 and1945 should be "examined for individual areas of significance in terms of concrete construction" (Frame 1989a:F-7). By the time the Bunge Midway grain elevator was constructed in the mid 1930s, major innovations in concrete construction technology had already been developed and it was well passed the age of innovation. Grain elevators built during that time were more likely to be generic structures than solutions to unique engineering problems (Robert Frame, personal communication 2001). Contemporary accounts of the construction of the Bunge Midway grain elevator and headhouse remark upon the speed in which the structure was erected, noting that is was done in "record time." The north storage bins took precisely 8 5/8 days, while the headhouse was

Bunge Midway Grain Elevator
Phase II Architectural History Evaluation
Hennepin County, Minnesota

Historic Property Boundary

Figure 20

completed in just 13 working days, at an average of about 16 feet per day (Clark 1942:32). While the rapidity of the project may have been remarkable, none of the journals cite specialized, innovative, or unique construction systems or techniques that were used to accomplish the task. One may presume that the quickness with which Bunge was able to erect their elevators was the result of the perfection of existing techniques and the practice of experience, rather than an experimental system. While impressive, the short duration of construction does not in and of itself make this a building of historical significance.

Neither the functional arrangement, materials nor construction techniques are considered to be significant contributing factors in the case of the Bunge Midway grain elevator. Therefore, it is recommended as not eligible under Criterion C.

The Bunge Midway grain elevator is not believed to have the potential to yield information important in prehistory or history, thereby making it not eligible under Criterion D. It is unlikely that any portions of earlier grain elevators exist where the 1930s structures now stand, although foundations or footings from the 1894 elevator may survive west of the 1935 storage annex. It is unlikely, however, that these remains would provide information important in understanding the operations and technology associated with grain elevators. Most of the significant engineering in grain elevators would have been located in the tank and elevators sections, not in the footings and foundations.

4.4 INTEGRITY

The integrity of the Bunge Midway grain elevator is good, with most of the components related to the 1930s structures remaining intact. According to the NRHP Multiple Property Documentation Form for Grain Elevators in Minnesota, the working house or headhouse and exterior structural integrity is necessary, although some historic changes in fenestration are acceptable. Other allowances are made for equipment such as cleaners, conveyors, motors, engines, legs, scales and distributors that would not affect the historical integrity should they be replaced or missing (Frame 1989a:F-7). Much of the equipment located within the headhouse and conveyor galleries currently remains in place. Particular items, such as the conveyors, spouting system, grain legs, man-lift, and car puller likely date from the 1930s. Photographs taken nearing the completion of the headhouse show that few exterior changes have taken place since its erection. The most significant alterations involved the removal and addition of the associated buildings to the site. Most significantly, the 1894 grain elevator, which remained standing until 1973, is no longer extant. A truck loading shelter, added to the east side of the headhouse when over-road grain transportation became increasingly important in the 1980s, has been recently removed. Other structures have been added, including the 1947 Quonset shed, the 1954 elevator annex, the circa-1965 office building, and the 1973 metal warehouse. These structures do not physically affect the concrete elevators and headhouse and do not significantly detract from the setting of the grain elevator complex. The Bunge Midway grain elevator complex retains strong aspects of design, setting, materials, workmanship,

and location. Its status as an inactive elevator somewhat diminishes the aspects of feeling and association.

4.5 RECOMMENDATION

The Bunge Midway grain elevator complex is historically significant under NRHP Criterion A for its association with the Minneapolis grain trade and its major contribution in giving Minneapolis a larger capacity of grain storage than any other North American city, thereby enabling the grain exchange commodities market to flourish during the mid-twentieth century. The property is significant in the area of commerce and its period of significance is 1935 to 1940. The property retains a high degree of historical integrity, with nearly all of the 1930s elements remaining intact and only minor non-contributing structures. Because the property is associated with events important in the commerce of Minneapolis and because it retains sufficient historical integrity to convey that significance, the Bunge Midway grain elevator complex is recommended as eligible for listing on the NRHP. Contributing elements to the complex include the headhouse, the 1935 and 1936 storage annexes, and the 1936 office building, Non-contributing elements are the 1954 grain bins, the circa-1965 office building, the 1947 Quonset shed, and the 1973 metal warehouse.

5.0 RECOMMENDATIONS

The 106 Group performed a Phase II architectural history investigation of the Bunge Midway grain elevator located at 932 12th Avenue SE, Minneapolis in Hennepin County in February 2006 for PPL, which will be receiving HUD funding.

5.1 EVALUATION

The Bunge Midway grain elevator is recommended as eligible for listing on the NRHP under Criterion A, contributing to the understanding of broad patterns of history. The construction of the extant additions of 1935 and 1936 were the major contributors to the increased storage capacity of Minneapolis elevators, making the city the largest grain storage handling facility in North America, and possibly the world. Minneapolis would be able to hold this position for at least the next three decades. The capacity for grain storage was critically interlaced with the city's ability to serve as a grain exchange and financial center, representing an important aspect of the city's economy. For this reason, the Bunge Midway grain elevator is recommended as significant under NRHP Criterion A in the area of commerce. The complex retains most of the key elements from the 1930s expansion and later additions do not significantly diminish its historical integrity. Therefore, the property is recommended as eligible for listing on the NRHP.

5.2 PRESERVATION AND MITIGATION

The decline of the grain market and the need for storage has resulted in the abandonment of several of the smaller and less efficient grain-handling facilities in Minneapolis. Preservation and adaptive reuse of the structures is problematic, and several have already succumbed to demolition, or are slated for removal.* Several studies have been conducted in the Twin Cities and elsewhere on the reuse potential for these types of structures.

In the 1980s, Robert M. Frame III undertook a survey of reuse projects in conjunction with the proposed demolition of the WCCO Elevator Houses No. 2 and No. 3 (Frame 1989b). Frame identified factors that affect the feasibility of the reuse of the grain elevators and identified the following critical issues:

- Reinforced-concrete grain elevators are difficult and expensive to demolish due to their unusually strong, monolithic concrete forms.
- The bin space of elevators is not readily adaptable for the bulk storage of other commodities.
- The non-bin space of elevators, sheds at ground level and headhouses, have been adapted successfully for other uses.

* Specifically, the Stewart-Cepro elevator in south Minneapolis was demolished in 2003 and the grain elevators associated with the Pillsbury "A" Mill complex in the St. Anthony Falls Historic District have been approved for demolition by the Minneapolis HPC pending mitigation.

- The vertical orientation of the interior spaces and lack of windows make the bins difficult to adapt for other uses.
- The insertion of windows into bin walls for the accommodation of uses that require human occupancy adversely affects the character-defining qualities of the structures.
- The removal of bin walls to create larger areas, an expensive proposition, also impacts the character of the building type, but in a way less evident on the exterior of the structure.
- There are costs and liabilities for elevator owners when they are left standing and are not in use (Frame 1989b).

In her study of the proposed redevelopment of the Pillsbury "A" Mill complex in the St. Anthony Falls Historic District in Minneapolis, Betsy Bradley, Ph.D. reviewed current literature and case studies of the reuse of grain elevators (Bradley 2005). Among the examples cited were the Quaker Square Hilton in Akron, Ohio, the Cereal Grading Company elevator, now known as Calhoun Isles in south Minneapolis, and the Old Town Granary Motel in Irvine, California. In most cases, the adaptive use of these structures into residential units would not have met the *Secretary of the Interior's Standards for Rehabilitation* (with the exception of the Old Town Granary Motel), and would have been considered an adverse effect (Bradley 2005).

Bradley also summarized a feasibility study for the reuse of the Stewart-Cepro Grain Elevator, which considered two ideas in detail: converting the elevator into housing or into a sculpture garden/activity center that incorporated a climbing wall. Neither of these concepts proved to be feasible for the Stewart-Cepro Grain Elevator, despite the successful examples of the climbing wall idea in other cities. Reinforced concrete elevators in Bloomington, Illinois and Carrolton, Texas have been converted successfully into climbing facilities (Zschomler 2003). As in any type of business, a rock climbing gym requires parking and space in addition to the bins. While it might be possible that one of the grain elevators in the Twin Cities area could be converted into a climbing gym, the concept is not feasible for many such structures.

Another development cited by Bradley was the proposal for the Baltimore & Ohio Locust Point Grain Terminal Elevator, a mixed-use development in Baltimore known as Silo Point. The initial plans for the project included converting the tower to luxury condominiums and hollowing out the block of 110 grain bins for use as a parking garage (Gunts 2003).

In her summary, Bradley notes that the conversion of the grain elevators to residential use would likely result in significant changes to the physical fabric and historical character of the structure and remarks, "it is not clear that this approach would be significantly better than demolition" (Bradley 2005:35). Alternatively, the Baltimore example of converting the bins into a parking garage, may be among the more feasible approaches, while preserving the historic character of the structures. Bradley noted, however, that at the time of her study, the parking garage option was yet untested.

It is yet undetermined whether any of these alternatives would be a viable option for the Bunge Midway project, meeting the goals of both PPL and HUD. Another alternative would be the preservation of the grain elevators without their adaptive use. This alternative would leave little space to develop the number of housing units necessary for the site, but would retain the storage bins as sculptural, if not functional, forms. PPL's intention to retain the headhouse structure and convert it to housing would, in part, serve as a mitigating factor, since the headhouse is the tallest and most distinctive element of the complex. With the demolition of the other structures and the necessary insertion of windows into the headhouse, this effort would not, however, meet the *Secretary of the Interior's Standards for Rehabilitation.*

Given the cost, limited alternatives, and complications of preservation or adaptive reuse of the storage bin structures, demolition may be the most feasible option. Appropriate action may, however, be necessary to mitigate for this adverse effect. In the case of the Stewart-Cepro grain elevator, mitigation included the photographic and narrative documentation of the structure for the Minnesota Historic Properties Record, which not only documented the exterior and interior features of the property, but also explained in detail the workings of terminal grain elevator operations. Similar mitigation or interpretive displays also may be appropriate as mitigation for the demolition of the Bunge Midway grain elevator. Potential mitigation packages may include:

- Minnesota Historic Properties Record photographic and historical documentation of the property with original documents to be retained at the Minnesota Historical Society.
- Photographic documentation with the intention to be displayed in the common areas of new housing development (although such areas would not be open to the general public).
- Public interpretive exhibit with themes such as:
    - The function and processes of grain elevators;
    - The history of the Minneapolis exchange; and/or
    - Photographic exhibit of the Bunge Midway grain elevator and other local elevators.

  Potential partner organizations for the public exhibit may include the Hennepin County Historical Society, the Minneapolis Public Library, or the Mill City Museum.
- Interpretive signage, such as a bronze plaque, with information about the grain elevator to be displayed on the former Bunge Midway grain elevator property facing Van Cleve Park, which would create greater public exposure to the historic property.
- New residents could be provided with a brochure/booklet that tells the history of the place in which they reside and would be kept on file by the Minnesota Historical Society or a neighborhood association.

BIBLIOGRAPHY

Banham, Reyner
1986 *A Concrete Atlantis: U.S. Industrial Building and European Modern Architecture, 1900-1925.* MIT Press, Cambridge, Massachusetts.

Bradley, Betsy
2005 *Analysis of Effects for the Proposed Pillsbury "A" Mill Complex Project, Minneapolis, Hennepin County, Minnesota.* On file at the City of Minneapolis.

Bunge North America
2006 *Bunge North America (History).* Electronic access at http://www.bungenorthamerica.com/about/history.htm. 24 January 2006.

Clark, Charles Schmucker
1942 *Grain Elevators of North America.* Grain & Feed Journals. Chicago, Illinois.

Evenson, R. E.
1964 *An Economic Analysis of Changes in the Minnesota Grain Processing and Terminal Elevator Industries.* Unpublished Master's thesis, Graduate School of the University of Minnesota, St. Paul.

Folwell, R.H., and R. P. Durham
1937 The Development of Methods of Raising Slip Forms Used in Forming Concrete Bins. *Grain and Feed Journals* 542-545.

Frame, Robert
1989a *Grain Elevators in Minnesota.* National Register of Historic Places Multiple Property Documentation Form. On file at the Minnesota State Historic Preservation Office, St. Paul.

1989b *The WCCO Elevator Houses No. 2 and No. 3: A Report on the Study of Reuse Possibilities for Two Reinforced-Concrete Grain Elevators.* On file at the Minnesota State Historic Preservation Office, St. Paul.

Gunts, Edward
2003 *Panel to Nominate Grain Elevator for Historic Listing.* Electronic document, http://www.baltimoresun.com/features/lifestyle/balto.archcol23aug23,0,4583252.column, accessed September 14, 2004.

LaPray, Joseph
1980 Terminal Elevators. *Greater Minneapolis: The Magazine of Twin Cities Business Management.* November-December 84-91.

Minneapolis Chamber of Commerce

1930 *The Chamber of Commerce of Minneapolis, Minn.: The Nation's Premier Hedging Market.* Minneapolis Chamber of Commerce, Minneapolis.

1934 *Annual Report.* Minneapolis Chamber of Commerce, Minneapolis.

1935 *Annual Report.* Minneapolis Chamber of Commerce, Minneapolis.

1936 *Annual Report.* Minneapolis Chamber of Commerce, Minneapolis.

1938 *Annual Report.* Minneapolis Chamber of Commerce, Minneapolis.

1940 *Annual Report.* Minneapolis Chamber of Commerce, Minneapolis.

1946 *Grain from Farm to Market.* Minneapolis Chamber of Commerce, Minneapolis.

1950 *Annual Report.* Minneapolis Chamber of Commerce, Minneapolis.

1965 *Annual Report.* Minneapolis Chamber of Commerce, Minneapolis.

Minneapolis Community Development Agency (MCDA)

1997 *Grain Elevator Inventory 1997.* Prepared for the Heritage Preservation Commission. Prepared by the Minneapolis Community Development Agency. On file at the Minneapolis Heritage Preservation Commission, Minneapolis City Hall.

Minneapolis Grain Exchange

1968 *The Farmer Wants to Know How To Market Grain.* Published by the Minneapolis Grain Exchange, Minneapolis.

2001 *History of the Minneapolis Grain Exchange.* Available at URL, http://www.mgex.com/MGE%20History.htm. Accessed 11 June 2001.

National Park Service

1983 Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation. *Federal Register* 48(190):44716-44740.

1995 *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation.* Government Printing Office, Washington, D.C.

Northwestern Miller
1936a "Bunge Firm Will Build Elevator at Minneapolis." 18 March. Miller Publishing Company. Minneapolis.

1936b "A Modern Addition to Minneapolis Terminal Elevator Capacity." 15 July. Miller Publishing Company. Minneapolis.

Rascher Insurance Map Company
1906 *Atlas of Minneapolis, Minnesota, and Suburbs.* Rascher Map Publishing Co., Chicago.

Philips, B. W.
1936 *The Grain Trade and Flour Milling Industry.* Ms. on file, Minnesota Historical Society, St. Paul.

Sanborn Map Company
1951 *Sanborn Fire Insurance Maps of Minneapolis.* Microfilm on file at the Minnesota Historical Society, St. Paul.

Schonberg, James S.
1956 *The Grain Trade: How It Works.* Exposition Press, New York.

Stark, William E. and Kristen Zschomler
2001 *Phase II Architectural History Investigation of the Stewart-Cepro Grain Elevator, Minneapolis, Hennepin County, Minnesota.* On file at the Minnesota State Historic Preservation Office. St. Paul.

Wills, Walter J.
1972 *An Introduction to Grain Marketing.* The Interstate Printers & Publishers Inc., Danville, Illinois.

Zahn, Thomas R. and Associates
1990 *Preservation Plan for the City of Minneapolis.* Prepared for the City of Minneapolis, Minneapolis.

Zschomler, Kristen
2003 Stewart-Cepro Grain Elevator Site Reuse Study. Letter to Hennepin County Department of Housing, Community Works & Transit. 23 April 2003. On file at Mn/DOT Cultural Resources Unit.

APPENDIX A: LIST OF PERSONNEL

LIST OF PERSONNEL

Project Manager/Principal Investigator	William E. Stark, M.A.
Report Author	William E. Stark, M.A.
Graphics	Leslie Kadish, M.A.